



# 2024 MARTOC MANAGEMENT AUDIT

Metropolitan Atlanta Rapid Transit Authority

November 22, 2024

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# Document History

<b>Revision Date</b>	<b>Description</b>	<b>Author</b>
9/6/2024	Revised 8. Finance & Budget based on session with CFO and others. Accepted via email on 9/9/2024.	C. Messier
9/30/2024	Added MARTA Responses to 7. Human Resources based on 9/27/2024 email.	C. Messier
10/15/2024	Incorporated MARTA feedback throughout document based on 10/7/2024 email.	C. Messier
10/23/2024	Incorporated MARTA feedback on remaining findings (1a, 1b, 1c, 2c, 6f, and 11b); updated 3e and 7d with new language.	C. Messier
11/1/2024	Formatting changes based on 10/31/2024 email.	C. Messier
11/22/2024	Removed draft watermark and footer.	C. Messier

# Background and Objectives

The Metropolitan Atlanta Rapid Transit Authority (“MARTA” or “the Authority”) engaged KPMG LLP (KPMG) to perform the Authority’s Fiscal Year 2024 (FY2024) MARTA Oversight Committee (MARTOC) Management Audit. The objective of the FY2024 MARTOC Management Audit was to assess the following key functions across the Authority:

- Rail Operations
- Bus Operations
- Paratransit (Mobility) Operations
- Capital Projects
- Information Technology (IT) and Security
- Human Resources (HR)
- Finance and Budget Compliance
- Contracts and Procurement
- Customer Service

This report satisfies the requirement in MARTA’s enabling legislation, the MARTA Act, to conduct a management audit on a quadrennial basis and deliver the report to MARTOC, the Board, State Auditor of Georgia, and the Governor of Georgia by calendar year end 2024.

## Scope and Methodology

KPMG and MARTA mutually agreed to a specific scope and tasks across each of the nine key functional areas, which is documented in the executed Letter of Agreement (L50516) dated May 17, 2024. Among the specific scope items performed, KPMG reviewed operational policies and procedures, assessed the Authority’s utilization of Oracle and other IT systems, and evaluated the efficiency, effectiveness, and performance across a variety of key metrics.

KPMG’s approach consisted of three phases and was based on our previous 2020 MARTOC Management Audit, public sector transit/transportation experience, and KPMG’s reputation for providing quality service.

## Phase 1 – Project Planning and Kickoff

During Phase 1, KPMG met with key project stakeholders to introduce the team and reaffirm project goals, milestones, and objectives. KPMG facilitated a kickoff meeting with the core group of MARTA project sponsors to discuss information and documentation requests, data access and provisioning, the interview list for stakeholders, the project schedule, and the roles and responsibilities of the KPMG team and MARTA personnel. KPMG confirmed that planned tasks were sized appropriately to be completed within the requested time frame, corroborated the key in-scope processes/procedures for review within each in-scope area, and validated the formatting of the final report with MARTA.

## Phase 2 – Information Gathering and Analysis

During Phase 2, KPMG reviewed the Authority’s existing policies and procedures and interviewed MARTA personnel to understand the strengths and opportunities within the in-scope functions and process areas. We gathered an understanding of current policies, procedures, and applicable governance and compared it to MARTA’s operations. This activity helped us identify areas of potential risk, possible control gaps, weaknesses, and non-value-add activities. While assessing each business process, KPMG focused on the following elements and objectives.

- Efficiency
- Effectiveness

- Duplication of efforts (redundancy)
- Compliance
- Weakness and gaps in controls
- Process inputs and outputs

Specific tasks by functional area are included in the table below:

Functional Area	Tasks
1. General	<ul style="list-style-type: none"> <li>• While not a core area, findings with organization-wide or cross-departmental impacts are included in this section.</li> </ul>
2. Rail Operations: <ul style="list-style-type: none"> <li>- Rail Car Maintenance</li> <li>- Maintenance of Way</li> <li>- Vertical Transportation</li> <li>- Facilities Management</li> </ul>	<ul style="list-style-type: none"> <li>• Determine the existence and effectiveness of policies and procedures to help ensure MARTA’s compliance with the MARTA Act and applicable Federal Transit Administration (FTA) and the Georgia Department of Transportation (GDOT) regulations and requirements, and the achievement of MARTA’s organizational objectives.</li> <li>• Evaluate how the Rail Operations Department monitors its performance and effectiveness.</li> </ul>
3. Bus Operations: <ul style="list-style-type: none"> <li>- Bus Maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Determine the existence and effectiveness of policies and procedures to help ensure MARTA’s compliance with the MARTA Act and applicable FTA and GDOT regulations and requirements, and the achievement of MARTA’s organizational objectives.</li> <li>• Evaluate how the Bus Operations Department monitors its performance and effectiveness.</li> </ul>
4. Paratransit (Mobility) Operations: <ul style="list-style-type: none"> <li>- Operational Performance</li> </ul>	<ul style="list-style-type: none"> <li>• Determine the existence and effectiveness of policies and procedures to help ensure MARTA’s compliance with the MARTA Act and applicable FTA and GDOT regulations and requirements, and the achievement of MARTA’s organizational objectives.</li> <li>• Evaluate how the Paratransit (Mobility) Department monitors its performance and effectiveness.</li> </ul>
5. Capital Projects	<ul style="list-style-type: none"> <li>• Review relevant policies and procedures for existence and quality.</li> <li>• Determine if adequate internal controls are in place for the effective and efficient planning,</li> </ul>

	<p>budgeting, and procurement of capital projects.</p> <ul style="list-style-type: none"> <li>• Assess how the performance of capital projects is monitored, evaluated, and reported to management and the Board.</li> </ul>
<p>6. IT &amp; Security</p>	<ul style="list-style-type: none"> <li>• Assess the extent of Oracle utilization within MARTA.</li> <li>• Review policies and procedures related to information security within the IT Department and the Information Security Department for existence and quality.</li> <li>• Determine if adequate internal controls over information security are in place within the IT Department and the Information Security Department.</li> <li>• Evaluate how the IT and Information Security Departments monitor and report their performance and effectiveness.</li> </ul>
<p>7. Human Resources</p>	<ul style="list-style-type: none"> <li>• Review policies and procedures related to employee administration for existence and quality.</li> <li>• Evaluate the effective use of information technology in the employee administration process.</li> </ul>
<p>8. Finance &amp; Budget Compliance</p>	<ul style="list-style-type: none"> <li>• Review policies and procedures related to budgeting for existence and quality.</li> <li>• Assess the efficiency and accuracy of the budgeting process.</li> </ul>
<p>9. Contracts &amp; Procurement</p>	<ul style="list-style-type: none"> <li>• Evaluate the efficiency of the procurement process lifecycle.</li> <li>• Assess the effectiveness and efficiency of the contract management process.</li> <li>• Evaluate the effective use of information technology in the contract management lifecycle.</li> </ul>

<p>10. Customer Experience/Service</p>	<ul style="list-style-type: none"> <li>Review policies and procedures of the Customer Service Department for existence and quality.</li> <li>Determine if adequate internal controls are in place within the Customer Service Call Center.</li> </ul>
<p>11. Other Specific Findings</p>	<ul style="list-style-type: none"> <li>Findings that did not align to a core area are included in this section.</li> </ul>

To complete these tasks, KPMG performed the following activities as part of Phase 2:

- Requested and Reviewed Existing Documentation.** This information was reviewed by the KPMG team and used in subsequent analyses, as appropriate. In part, this task involved collecting current and historical versions of the MARTA Act; relevant governing regulations, policies, and procedures; policy and procedure manuals; planning and budget documents; organization unit and program descriptions; staff information; management and financial reports; operating and performance data; capital, maintenance and repair data; copies of prior management audits, performance reviews, and studies, including Federal Transit Administration (FTA) and Georgia Department of Transportation (GDOT) documents; an inventory of information systems hardware and software; and current workflow process diagrams.
- Conducted Interviews.** During Phase 1, MARTA provided contact information for members of the executive management team that spanned the nine core functional areas. KPMG then *interviewed 29 key members of the MARTA executive management team* (i.e., C-Suite, General Managers, Assistant General Managers) and other MARTA personnel (i.e., Directors) referred by management. KPMG leveraged an interview guide for consistency and thoroughness across interview subjects that included questions about the existence of policies and procedures, the frequency and process for updating these documents, and adherence to them. Multiple members of the KPMG team participated in interviews; and afterwards, we consolidated the minutes, assessed the results of each interview, brainstormed potential observations for inclusion in the 2024 MARTOC Management Audit, and identified next steps for additional analysis efforts.
- Documented Observations.** To further substantiate what we learned from our documentation reviews and interviews, KPMG drafted observations related to certain aspects of various processes across the core functional areas. We validated how processes and functions occur operationally, not just how they are supposed to occur. *KPMG conducted 10 validation sessions with the main stakeholders of each core area.* KPMG reviewed in-scope policies, procedures, and processes against leading industry practices and for completeness, weaknesses, gaps in controls, and sub-optimal efficiency.
- Developed Findings and Recommendations.** As a result of the data gathering and drafting of observations, KPMG developed findings and recommendations. We developed meaningful, actionable recommendations connected with our findings/observations for MARTA's consideration that focused on the following objectives:

  - Performance improvement
  - Cost containment
  - Revenue efficiency improvement
  - Risk reduction
  - Decision-making facilitation

- Public accountability improvement

In developing the recommendations, the KPMG team considered methods to enhance the efficiency and effectiveness of each functional area, while simultaneously reducing and mitigating the inherent risk associated with these business processes.

## Phase 3 – Reporting and Recommendations

During Phase 3, KPMG finalized a draft report that summarizes the current state environment and recommendations for improvement. The recommendations are designed to enhance MARTA's daily operations and performance as well as mitigate current and future risks. KPMG presented the draft report to the group of MARTA project sponsors and appropriate interview candidates. MARTA provided written feedback, which KPMG considered prior to issuance of the final 2024 MARTOC Management Audit.

From Executive Assistants to the C-Suite, ***MARTA personnel fully cooperated with the management audit and allowed the KPMG team complete access to its books, records, and documentation to the extent that KPMG deemed necessary to complete this report.***

# Executive Summary

The following table summarizes the observations and recommendations that follow throughout the remainder of the 2024 MARTOC Management Audit report. KPMG assigned priorities for each observation and recommendation pair based on factors such as the degree of impact and return on investment to MARTA, as well as the risk/opportunity posed by the finding and the timeframe required to implement the recommendation.

## High-Priority Recommendations

Priority levels are based on impact to enhance return on investment and efficiencies. Our team has classified our observations and recommendations into high, medium, and low priorities tables. This system allows us to prioritize the areas that require immediate attention and have the highest impact on policy effectiveness and compliance:

- High priority items are those that demand urgent action and have significant consequences if left unaddressed. These observations and recommendations are critical to the success and compliance of the Authority.
- Medium priority items are important but may not have an immediate impact or require immediate action; however, they still play a significant role in enhancing policy effectiveness and should be addressed in a timely manner.
- Low priority items have minimal impact on policy compliance and effectiveness and can be considered for future improvements or modifications.

By utilizing this priority classification, the Authority can allocate resources effectively and address the most critical areas in a comprehensive and efficient manner.

High Priority	Medium Priority	Low Priority
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1. General
<b>Difficult to communicate with field operators via email</b>
<p><b>Observation #1a:</b> Business units under the Chief Administrative Officer (i.e., Human Resources, Diversity &amp; Inclusion, Employee &amp; Labor Relations) are responsible for communicating with the Authority’s entire workforce, including employees operating in the field or from satellite locations other than MARTA headquarters. These business units have challenges engaging employees with non-office-based jobs because the main channel of departmental communication is MARTA email accounts. This challenge was also expressed by the IT Department; since email accounts are locked after periods of inactivity (30 or 60 days), the IT Service Desk spends significant amount of time re-establishing accounts and resetting passwords for infrequent users. Email as the primary form of communication across the Authority creates barriers to effective communication and negatively impacts the timely dissemination of critical updates and information to all employees.</p>
<p><b>Recommendation #1a:</b> To reach a broader range of employees, KPMG recommends that MARTA consider alternate forms of official communication to augment email correspondence to MARTA email accounts. Certain employee demographics should be able to indicate their preference for alternate methods of communication so that they remain engaged. Based on the sensitivity of the information within the update, MARTA should consider leveraging social media (e.g., posts within restricted Facebook Groups and/or LinkedIn Groups), bulletins on the public MARTA website, paper flyers in break rooms at MARTA facilities, and mailed newsletters of upcoming policy changes and events. Further, KPMG recommends that Information Security and Technology Departments consider reviewing the current policy for allowing MARTA domain emails to be accessed on personal devices.</p>

Enabling employees to view work emails from privately-owned phones, tablets, and computers would increase viewership of key updates by field operators.

**MARTA Response:** MARTA will consider alternate forms of official communication to augment email correspondence to MARTA email accounts. We will review, and update if necessary, security, technology and human resource policies regarding the use of personal communications devices to access the MARTA domain. Security will take precedent as we consider alternate methods to access email accounts.

## 2. Rail Operations

### Rail Operations Staffing Challenges

**Observation #2c:** As with other operational departments, MARTA Rail Operations is experiencing staffing challenges impacting the efficiency and reliability of rail services. Rail operations leadership reported several open vacancies and detectable absenteeism. MARTA possesses a unique requirement that rail operators start their careers within MARTA bus services before training to become rail operators. It was reported that trainees that fail rail service testing or become disqualified due to failed attendance often revert to bus services. As operators obtain more seniority it may become beneficial to move between bus and rail operation due to their dual qualification. This can occur during the quarterly 'markup', MARTA's operational shift and staff planning period.

**Recommendation #2c:** KPMG recommends that MARTA implement targeted strategies to address staffing challenges and improve service efficiency and reliability. This includes developing targeted recruitment campaigns to fill open vacancies and implementing retention strategies to reduce absenteeism and turnover. Additionally, providing extra training and support for trainees can improve success rates in rail service testing and attendance, reducing the number of trainees reverting to bus services. Introducing incentive programs to reward attendance and performance will further encourage operators to maintain high standards and reliability. By addressing these areas, MARTA can enhance the efficiency and reliability of its rail services, ensuring better service for its passengers. MARTA leadership should investigate and quantify the issues around operator transfers during the quarterly 'markup'. If it is found to be a significant issue, the terms of the Collective Bargaining Agreement, which governs rail and bus operators within MARTA, should be changed during the next negotiation cycle. It is important to involve all stakeholders in the review and revision of this policy to ensure alignment and concurrence with the changes.

**MARTA Response:** MARTA is working on developing and implementing a dedicated line instructor program for Rail Training, to better assist Rail Operator Candidates to improve the pass rate and retention for candidates. MARTA currently has an attendance incentive program which was enhanced to a quarterly bonus during the last collective bargaining agreement. In addition, MARTA management team is currently discussing the issues and difficulties surrounding the Rail Operators transferring back and forth to Bus during Mark-Up. As this issue is specifically governed by the collective bargain agreement, MARTA is planning to address this topic during the next Union Negotiations.

## 3. Bus Operations

### Difficulty hiring bus and rail operators and maintaining headcount

**Observation #3a:** The process of attracting, hiring, and retaining bus and rail operators at MARTA is challenging for a variety of reasons, including:

- There is a stipulation in the collective bargaining agreement (CBA) requiring rail operators to begin their MARTA careers as bus operators, even if they have previous rail operator experience on other major transit systems. This makes it difficult to hire qualified candidates who would be ready to begin as rail operators with less training/onboarding than former bus operators.
- Even with the focus on training and employee retention driven by the Human Resources Department, which includes measures such as sign-on bonuses, quarterly incentive bonuses for attendance, scheduled pay raises, and sponsored training for commercial driver's license (CDL), MARTA struggles to retain bus operators due to the initial 18-month period during which their schedule and routes are not fixed. Since schedule and routes are based on seniority, new bus operators' hours often fluctuate between early shifts (begin at 4:00am) and late shifts (end at 2:30am) and change days week-over-week. The lack of work/life balance and a set schedule makes it difficult to retain bus operators.

- The highest-performing bus operators often elect to transition into rail operator positions once eligible. This results in continuous recruitment, hiring, training, and retention efforts for new bus operators that is felt across multiple MARTA departments.

Each of these factors introduces complexities that directly affect staffing levels, operational capacity, and the Authority's ability to best serve their ridership.

**Recommendation #3a:** KPMG recommends that MARTA consider drafting and adopting a policy that mirrors this stipulation in the labor agreement to enable direct hiring into rail operator positions. The Authority should attempt to negotiate this stipulation with the ATU Local 732 and prepare to justify the new policy from the lens of employee satisfaction, safety, and customer service. This will allow the highest-performing bus operators to remain in that position, while permitting additional train service and improved, faster service. KPMG also recommends that MARTA continue the mentorship program for bus operators.

**MARTA Response:** As it relates to the CBA requirement for hiring rail operators, Bus Operations will continue to work with our Labor Relations office to craft language for presentation during the upcoming CBA negotiations. It is clear that the direct hiring of rail operators will decrease pressure on bus operator staffing levels and result in a more efficient means to operate rail service. As to employee retention, recently, and as a test, MARTA Service Scheduling "re-cut" the existing cafeteria style bus schedule approach to a rostering style bus schedule approach. This is the industry standard and used by most transit bus agencies in the US. This approach to scheduling stabilizes the work week for operators lacking enough seniority to choose a work schedule aligned with their personal preferences. Rostering has been proven to result in greater schedule consistency, back-to-back off days, flexibility of eight and ten-hour shifts, and fixed overnight breaks for safety. It is clear that at a minimum, implementing this approach for our most fragile segment of the bus operator cohort, the 1-18-month employees, will increase retention. Making this change would benefit the Authority tremendously and does require approval and the cooperation of our ATU Local 732. Our plan is to seek approval for the ATU of a pilot rollout of rostering for an upcoming markup and if successful, adopt rostering as our scheduling making approach for bus operators permanently. Regarding the mentorship program, Technical Training is currently implementing a plan to roll this out to the other two bus divisions who currently do not have it. In addition, during January 2024, MARTA Technical Training, in cooperation with our ATU Local 732, implemented a Line Instructor program which in a short time, has returned solid results. We have seen bus operators who continued to struggle post-training get the additional instruction required and now are performing to standard.

#### 4. Paratransit (Mobility) Operations

##### Mobility Services performance

**Observation #4a:** MARTA paratransit ridership increased significantly between 2020 and 2024 while the economy recovers from the global COVID-19 pandemic. As reported by Mobility Services leadership, ridership increased by 10% during the past four years, challenging paratransit services due to the reduced occupancy rules. As a result, KPIs such as On-Time Performance (OTP) have declined, while Missed Trips (passengers waiting for longer than 30 minutes) and Complaints per 1,000 trips increased. Since reduced occupancy was lifted, Mobility Services' ability to meet and exceed these KPIs is improving. MARTA is also procuring vehicles with higher occupancy to alleviate some of the pressures for Mobility Services and continue to improve performance.

**Recommendation #4a:** To address the challenges posed by increased ridership, KPMG recommends that MARTA continue procuring higher occupancy vehicles to accommodate more passengers and reduce pressure on existing services. Additionally, implementing advanced scheduling and routing software will optimize efficiency and minimize wait times, while regularly reviewing and adjusting routes based on demand will help ensure optimal coverage. Improving communication with passengers is also crucial (e.g., providing timely updates on service changes and delays) as is implementing a feedback system to gather and address passenger concerns promptly.

**MARTA Response:** In FY24, MARTA implemented 15 lift-equipped minivans into revenue service thereby diversifying the existing fleet and increasing capacity; this, too, aided in better accommodating of single-passenger trips in efforts to maximize larger L-vans usage for multi-passenger and/or shared-ride trips. A procurement is currently underway to add additional minivans and full-sized vans to the fleet in FY25. Lastly,

MARTA's fleet replacement plan includes long-term procurement to replace approximately 20% of the existing fleet annually; the associated RFP is being prepared.

#### 4. Paratransit (Mobility) Operations

##### Mobility fleet past EOL and below "state of good repair"

**Observation #4c:** The paratransit fleet consists of 239 vehicles. MARTA's capital planning process provides for the replacement of lighter-duty mobility vans on a five-year or 150,000-mile cycle. At present, about 50% of these vehicles exceed the targeted age and mileage, with some reaching 200,000+ miles. This results in frequent vehicle maintenance needs for high-cost items, such as engine replacements and transmission failures, and resulting in uneconomical maintenance decisions. Regular "wear-and-tear" and collisions with motorists also contribute to expensive repairs of the paratransit fleet. MARTA's Mobility Services fleet does not include battery-electric vehicles (EV), or hybrid vehicles. Most MARTA vehicles are fully- or partially funded by contributions from the Federal government, which requires adherence to the Buy America Program's regulations. At present, no manufacturer of EV paratransit vehicles satisfies these requirements.

**Recommendation #4c:** KPMG recommends that MARTA address the aging Mobility Services fleet. It is crucial to prioritize the replacement of high-mileage vehicles to reduce frequent and costly maintenance needs. MARTA should explore opportunities to incorporate EV or hybrid vehicles into the paratransit fleet, despite current challenges with the Buy America Program's regulations and the lack of compliant EV paratransit vehicle manufacturers. This transition could be facilitated by engaging with manufacturers to encourage the development of compliant EV options and seeking alternative funding sources to support the procurement of more sustainable vehicles. Furthermore, MARTA should implement a robust maintenance and collision management program to address regular wear-and-tear and collisions with motorists, thereby minimizing expensive repairs and ensuring the fleet remains in optimal condition. This may include additional training for drivers in collaboration with the third-party paratransit providers to better report on vehicle health and prevent collisions. By taking these steps, MARTA can enhance the reliability and efficiency of its Mobility Services fleet, improving service delivery and reducing operational costs.

**MARTA Response:** Post-COVID budget constraints and long lead times for cutaway chassis have led MARTA to reexamine types and sizes of readily available vehicles. MARTA procured 15 minivans in FY23 to determine their viability, which has led to a larger procurement of minivans and full-sized vans in FY25. Furthermore, an RFP for long-term procurements is being prepared to replace approx. 20% of the mobility fleet annually as called for in the MARTA fleet replacement plan. Additionally, the scope of work for the upcoming solicitation for contracted Operations & Maintenance services will include more stringent requirements, based on lessons learned from previous and current contracts, pertinent to vehicle maintenance and reliability management, accident collision preventability, and pre-/post-trip vehicle condition reporting.

#### 5. Capital Projects

##### Retention challenges and gaps in skillsets

**Observation #5a:** MARTA, like many of its peer public transit authorities, is challenged to hire and retain the staffing levels and skillsets necessary to effectively support the capital program. Multiple vacancies within Capital Projects are difficult to fill with appropriately skilled resources (i.e., Design, Engineering, and Infrastructure reported 20+ vacancies). Teams that support hiring, such as Human Resources, are also short-staffed. Although Human Resources and internal recruitment teams regularly host recruitment events at partner organizations and academic institutions (universities and high schools) in addition to online job postings (both on MARTA website and other online job recruitment portals), certain groups within MARTA engage with external recruiting support to identify and recruit resources with the appropriate skill sets and experience. Staff retention among younger employees is a recurring issue, primarily due to the availability of higher salaries in external positions. As per internal policy, salary caps must be equal for positions across departments. This has been reported as challenging by CPEI leadership, as the group requires higher levels of experience and additional qualifications. While succession planning and staff development strategies are in place, this was reported as a concern because the younger generation of project managers and planners

are needed to backfill the aging and retiring workforce. Further, several Department Leads reported that vacancies within the business units reporting to the Chief Capital Officer (i.e., CPMO, Capital Programs Delivery, Capital Planning) impact the Authority's ability to efficiently project manage capital projects. These business units rely heavily on external consultants to augment the MARTA workforce. For example, approximately 50% of the 35-person CPMO team are consultants and Capital Programs Delivery relies on external architectural and engineering firms.

**Recommendation #5a:**

To address the challenges surrounding hiring and staff retention, KPMG recommends that MARTA consider the following mitigations:

- Focus on improving and tailoring recruitment strategies to attract a diverse pool of qualified candidates. Actively promote job openings through targeted channels based on talent needs, including, digital platforms, university partnerships, job boards, professional networks, and partnerships with educational institutions, as well as hiring external recruitment resources where appropriate.
- Review and benchmark compensation packages and consider offering market-competitive salaries and benefits to attract and retain top talent. Conduct market research to help ensure that compensation aligns with industry standards and adjust compensation packages accordingly. Benchmarking organizations should include transit agencies and engineering consulting firms, construction companies, utilities, and municipalities.
- Revise internal policies that limit the compensation offered to potential candidates for positions with higher qualification and experience requirements.
- Explore non-traditional benefits and flexibility options that appeal to diverse demographics, including younger generations. Regularly review and adjust compensation structures to reflect market changes and employee performance.
- Provide opportunities for professional development, beyond training and certifications. Emphasize career advancement prospects to retain employees, particularly younger staff. Introduce mentorship programs between junior and senior capital projects staff, cross-functional training, and opportunities to work on challenging and meaningful projects.
- Prioritize creating a supportive and inclusive work environment that promotes employee engagement and well-being. Implement initiatives such as employee recognition programs, work-life balance policies, and foster a culture of open communication and teamwork.
- Establish and/or formalize robust learning and development programs tailored to employee career paths, including leadership training for high-potential individuals. Promote a culture of internal mobility, encouraging employees to explore different roles and projects within MARTA. Engage employees in shaping their development plans, linking their goals with organizational objectives.

By implementing these recommendations, MARTA will be better positioned to attract and retain highly skilled employees, creating teams that can effectively handle workload demands. This will contribute to improved efficiency and effectiveness in project execution and overall organizational success.

**MARTA Response:** As noted, MARTA is not unlike other peer agencies, including locally where the region continues to see workforce shortages, particularly in the types of roles required for capital delivery. With large scale programs, both public and private, being delivered in Atlanta, to remain competitive MARTA continues to strive to attract and retain talent, developing and broadening skill sets among team members, and focusing on relocating individuals into the region. CPEI works collaboratively with the department of Human Resources in recruiting strategies and deployment opportunities for professional development. The division is supported by seconded consultant staff, utilizing subject matter experts in key roles to continue to implement best practices for capital delivery and to continue to advance the capital program. With the leadership in the department, the increased support and inclusivity is a continued effort to create a culture of open communication and teamwork. CPEI agrees that this will help to encourage candidates and leaders to see MARTA as a preferred workplace. The recommendations will be implemented to align with the agency's strategic goals and the department's mission to employ a strong, qualified workforce to support the program.

## 6. Information Technology & Security

### Comprehensive incident response plan

**Observation #6a:** MARTA has documented incident response plans for cybersecurity breaches that are reviewed annually in addition to tabletop exercises that are conducted more frequently. The incident response process involves communication templates and an escalation protocol starting with the identification of the issue, contacting leadership, and potentially involving external organizations such as the Department of Homeland Security (DHS) and Federal Bureau of Investigation (FBI). MARTA's Chief Information Security Officer (CISO) is responsible for determining whether external agencies are to be involved. Which external agencies are involved is determined by the severity of a particular incident. MARTA is establishing a network operating center (NOC) that will monitor the MARTA network and systems for operational outages and other anomalies 24/7. Leadership is considering combining in the NOC with the security operating center (SOC) for first level triaging, troubleshooting, and escalation of outages and security incidents as the next step towards comprehensive monitoring and incident response set-up.

**Recommendation #6a:** It is our understanding that IT & Security leadership continue to work towards a robust incident response plan. Given the rising frequency of cybersecurity and ransomware attacks on US-based organizations, KPMG recommends that MARTA consider staying well-prepared to defend against these potential cyber threats. The recent CrowdStrike incident also highlights the need for a well-planned incident response plan even for unintentional incidents that cause system and network outages. By implementing these strategies and reviewing them on a quarterly basis or as lessons learned from security incidents, MARTA can develop a comprehensive and effective incident response plan that will enable rapid and coordinated responses to future cyber incidents. Specifically, MARTA should consider the following mitigations:

- Develop a comprehensive incident response program framework that outlines the scope, objectives, and authority of the incident response program. The framework should also contain the organizational structure of the Incident Response Team (IRT), including decision-making authority and escalation procedure and outline how the incident response program aligns with other security, risk management, and business continuity initiatives across MARTA. (Note: the term "authority" is not tied to specific roles or responsibilities; it is a position designated by the security organization, which can be a security manager, project manager, or technical lead.
- Create an incident response playbook that provides detailed procedures for handling different types of incidents. Along with the standard operating procedures (SOPs), the playbook should define criteria for categorizing incidents based on severity, impact, and type; and outline the phases of incident response, including preparation, detection, containment, eradication, recovery, and lessons learned.
- Maintain an incident response toolkit that identifies and provides access to necessary tools for incident responders. The toolkit should include a tool inventory of the hardware and software tools used to manage incident responses, tool access and management protocols, and tool training for IRT members on proper usage and capabilities.
- Establish an incident response communication plan to maintain an updated list of contact information for the IRT, key stakeholders, and external partners. The plan should also include communication roles and responsibilities, communication channels, messaging guidelines, and a crisis communication plan outlining the procedures for managing public relations and media inquiries during major cyber incidents.
- Implement incident response documentation standards that includes protocols for maintaining documentation templates, documentation procedures, the lessons learned repository, and the documentation retention policy.

**MARTA Response:** The Information Security Department is encouraged by our current progress, particularly with annual reviews and regular tabletop exercises. The need for a comprehensive incident response framework is critical to align our cybersecurity efforts with broader risk management and business continuity initiatives. Furthermore, combining the Network Operations Center (NOC) with the Security Operations Center (SOC) would provide an integrated, real-time triaging solution that enhances both operational and security responses. I am confident that our leadership team is moving in the right direction, the rising frequency of ransomware and cyberattacks demonstrates, preparation must be both proactive and responsive. Moving forward, the Information Security Department will continue to focus on developing the comprehensive incident response program framework as outlined, including clear decision-making authority and integration with other key organizational processes. The incident response playbook and communication

plan are also priorities, ensuring we have detailed procedures and protocols in place for various types of incidents, as well as robust crisis communication strategies. By also enhancing our toolkit and documentation standards, we will further strengthen our capacity to address security threats with agility and efficiency. These steps are reviewed quarterly and after significant incidents, in order for our department to remain well-prepared for future cyber events.

## 6. Information Technology & Security

### Update policies and procedures to address emerging technology risks

**Observation #6f:** While different components of the Information Security and Technology Departments are continuously subjected to the annual internal audit process, technology remains a high-risk area to MARTA due to external threats. The constant evolution of technology and the associated security threats (e.g., cyberattacks, ransomware, and state-sponsored cyber intrusions), creates an environment where security measures are frequently revised via patches and updates to protect MARTA's systems. Although the Authority is proactive when possible and responds quickly to mitigate security threats, there is sometimes a delay in the document administration updates of the impacted policies, procedures, and standard operating procedures, resulting in gaps between the adopted operational processes and the documentation.

**Recommendation #6f:** KPMG recommends that MARTA consider reviewing and updating IT policies and procedures more often than the annual audit plan. Specifically, the Chief Information Security Officer (CISO) should review their policies and procedures for potentially missing updates, additions, and removals to policies and workflow monthly. To promote flexibility into the annual audit plan and address event-based situations, the CISO should collaborate with the Internal Audit Department and Chief

**MARTA Response:** MARTA acknowledges the observation and recommendation provided by KPMG. While we maintain a strong focus on mitigating evolving cyber threats through the use of various technology along with timely patches and updates, we recognize the need for more frequent reviews of our policies and procedures to ensure alignment with operational practices. To address this, the Information Security Department will implement a bi-annual review cycle, in addition to the annual audit, to ensure that documentation accurately reflects current security measures. We will also strengthen collaboration with the Internal Audit Department to address event-driven updates and minimize any gaps in policy administration.

## 7. Human Resources

### Limitations of the current use of the Oracle Cloud Recruiting Module

**Observation #7a:** The Human Resources Department is responsible for recruiting qualified candidates for positions across the Authority. The Oracle Cloud Recruiting Module is not integrated with the other Oracle modules and information technology systems leveraged by other departments and business units. Further, there are several limitations within the module, including the inability to flag/identify previous applicants or key word search resume submissions. This can result in time-consuming, manual tasks and duplication of efforts (e.g., repeated application reviews/interviews for previously disqualified candidates).

**Recommendation #7a:** To accelerate the Human Resources Department's FY2024 rate of hiring (~500 staff) while maintaining the current team composition and number of full-time equivalents (FTEs), KPMG recommends that MARTA consider developing workaround procedures to supplement limitations of the present version of the Recruiting Module. The current five-year contract with Oracle limits the Authority's ability to customize and configure to meet each business unit's unique needs. In future IT procurements, upgrades, and patches, the Authority should consider how the HR Department uses recruiting tools to meet organization-wide goals, such as Title VI and Diversity and Inclusion.

**MARTA Response:** HR has leveraged other tools to increase the applicant pool. We recently upgraded our contract with LinkedIn, renewed the Indeed.com and have been working closely with the IT department to purchase tools and modules within Oracle Cloud that will provide the ability to source through resumes and identify potential candidates more efficiently.

## 7. Human Resources

### Sharing PII with ATU Local 732

**Observation #7d:** 63% of MARTA employees and the majority of neighboring transit jurisdiction employees are represented by the Amalgamated Transit Union (ATU) Local 732. As a result of recent arbitration, the active 2023 collective bargaining agreement negotiated between the Authority and the Union now contains a provision stipulating that any complaints or actions potentially leading to disciplinary measures against a member necessitates formal notification from MARTA to ATU Local 732. This includes matters related to Title VII employment discrimination complaints. Consequently, MARTA is required to disclose personally identifiable information (PII) about the employee who made the complaint (plaintiff) and the subject of the complaint (defendant) to the Union during the case investigation, even if it does not amount to a disciplinary action. This provision creates challenges to protecting the confidentiality of involved parties and poses an information handling risk during the transfer of this information from MARTA systems to ATU Local 732 systems.

**Recommendation #7d:** KPMG recommends that MARTA consider implementing workflow procedures and information handling policies to help guide the data exchange of PII between the Authority and the Union and minimize the risk of exposing employee information. The data governance and data security for this interaction should describe the people, processes, and technologies involved to ensure appropriate access restricted to a small group of users, privacy, and confidentiality. Additionally, MARTA should continue to maintain positive and productive relations between the Employee & Labor Relations Department and the union to reinforce collaborative problem-solving and dispute resolution.

**MARTA Response:** In an effort to address concerns and challenges raised regarding protecting the confidentiality of parties of Title VII complaints when providing email notifications to MARTA management and ATU Local 732 officials, the following actions will be taken: The Department of Diversity & Inclusion will mark the email notifications as “Strictly Confidential – Do Not Forward”. In addition, Diversity & Inclusion and the Department of Labor and Employee Relations will work with the Department of Technology to consider different technological solutions that are available to track the receipt and opening of the emails.

## 7. Human Resources

### Enforcing policies and procedures at the staff and manager-levels

**Observation #7e:** The Human Resources, Diversity & Inclusion, and Employee & Labor Relations Departments are responsible for investigating certain types of complaints made by and about MARTA employees. They identified challenges in the adherence to procedures below the level of Assistant General Manager (AGM) due to a lack of awareness of the organization’s policies. For example, sexual harassment allegations may not be escalated to the appropriate team for investigation in a timely manner. It is common for the manager of employees to attempt to deconflict the situation without HR’s involvement. Late notification of alleged incidents impedes the investigation team’s ability to meet the Federal Transit Authority’s (FTA) requirement of complaint resolution within 90 days. It also negatively affects the retention of victims of alleged bullying and/or harassment.

**Recommendation #7e:** KPMG recommends that MARTA consider performing a root cause analysis of why Human Resources policy awareness and procedure adherence decreases below the AGM level. In addition to one-time training requirements (often during the onboarding process), MARTA should consider increasing the cadence to annual trainings, supplementing training videos with instructor-led sessions, including accompanying course exams and evaluations, and targeting the audience by level or event. Training compliance should be tracked and documented in improvement plans for frequent offenders.

**MARTA Response:** HR has developed and implemented several training courses over the past 6 months to educate managers on topics such as the procurement process, reviewing dashboards in Power BI, processing employee changes in Oracle, etc. The newest course is called MTOP (Management Transit Orientation Program). The purpose of this program is to ensure newly hired or newly promoted managers are provided the tools necessary to perform in a management position. This course is mandatory and is reported to the AGM or C-level leadership to ensure compliance.

## 9. Contracts & Procurement

### Manual procurement processes

**Observation #9a:** The Authority leverages a combination of automated and manual processes to execute key procurement functions, resulting in increased frustration by the Contracts, Procurement, and Materials Department unit as well as user agencies. Paper processes contribute to time-consuming competitive and sole-source procurement cycles, are more prone to human error, and are an inefficient use of the procurement resources (e.g., redundancy in duplication of data entry). The procurement procedures meet local, state, and federal requirements and are documented within the Procurement Procedure Manual (available on the public website and SharePoint).

**Recommendation #9a:** In line with a recommendation from the 2020 MARTOC Management Audit, KPMG recommends that MARTA consider limiting the Authority's reliance on paper and manual workflow in their procurement process. MARTA should consider reviewing the current procurement processes to identify opportunities to automate them and streamline procurements. It is our understanding that the Authority is transitioning to Oracle Cloud in the next 12-18 months. MARTA should consider moving procurement processes to a fully automated system, such as Oracle Cloud, to reduce human errors, human effort, and processing times as well integrate procurement processes with the project management information system (i.e., Unifier) and the capital planning programs. This integration will promote Authority-wide efficiencies and enable more robust reporting.

**MARTA Response:** MARTA agrees with the recommendation to automate the procurement process where possible, in fact MARTA anticipates having a near fully automated procurement process in place in the next 18-24 months as part of our Oracle Cloud migration. In addition, MARTA adopted an Amended and Restated Procurement Procedure Manual that has resulted in a streamlined manual/process that is still compliant with Local, State and Federal requirements.

## 9. Contracts & Procurement

### Absence of a contract management system

**Observation #9b:** The Authority currently leverages a centralized repository for contracts and associated files rather than a contract management system. As noted in the 2020 MARTOC Management Audit, MARTA does not leverage a fully automated system (i.e., Oracle Cloud) to effectively manage and administer contracts. Rather, the Contracts, Procurement, and Materials Department uses Excel spreadsheets to manually enter system data and monitor spend against each contract. They are also responsible for maintaining the contract files, which include signed original copies, the complete history of transactions, contract payments, an up-to-date project schedule, and safety and quality assurance deliverables related to each contract. The contract files are retained in accordance with the timelines set by the MARTA Records Management Policy and Records Retention Schedule. The lack of a contract management system increases processing time throughout the contract administration lifecycle, adds risk of human error through manual tracking of each line item, impedes the ability to meet service level agreements (SLAs), and reduces visibility and accurate reporting of key contract management data.

**Recommendation #9b:** It is our understanding that as a result of a KPMG finding in the 2020 MARTOC Management finding Contracts, Procurement, and Materials is collaborating with the Information Security and Technology Departments to assess and implement a new contract management system that will automate contract management and administration processes. KPMG recommends that MARTA consider Oracle Cloud contract management functionality and develop processes to effectively leverage and integrate this functionality across the organization (e.g., automated workflow that crosses departments and encompasses legal review and sign-off).

**MARTA Response:** MARTA will continue to work with the appropriate departments to implement a more robust contract management system as part of our Oracle Cloud migration. MARTA anticipates that the automated procurement process along with a more robust contract management system will result in a more efficient procurement process that will assist in the delivery of operating and capital programs.

## 9. Contracts & Procurement

### Need for leadership positions in the Contracts, Procurement, and Materials Department

**Observation #9c:** The Contracts, Procurement, and Materials Department (CPM) is the only MARTA department (within the scope of the 2024 MARTOC Management Audit core areas) that does not have an

Assistant General Manager (AGM) or General Manager (GM) position within the departmental organization structure. Rather, the topmost position is at the Director level. The absence of an AGM or DGM role in this business unit poses a risk to MARTA AGM level is less likely to be influenced by management and less likely to ignore recommendations or direction from CPM.

**Recommendation #9c:** With the transition of CPM from under the Chief Financial Officer to under the Chief Legal Counsel, KPMG recommends that MARTA consider adding an Assistant General Manager and/or Deputy General Manager position to the CPM Department to provide more authority in interactions with other departments.

**MARTA Response:** MARTA is not aware of any instances of influence by management over procurement matters. However, MARTA will review the organization structure of CPM and make the necessary changes in a manner that addresses the concerns of the Auditor that provides for continued improvements and leadership of the current office.

## 10. Customer Experience / Service

### Enhancements to customer feedback collection and measurement

**Observation #10a:** The Voice of the Customer (VOC) survey is the Authority's current instrument for collecting customer feedback and performance ratings. The channel for complaints, suggestions, and praise is for the customer to contact the Customer Service Center, which is external to Research and Analysis (R&A). The H.E.A.T system is also used to collect, track and follow-up customer complaints in the field. Sprout social management tool is used to compile comments from MARTAs social media channels and to publish and schedule posts. Complaints from the social channels are documented and processed into H.E.A.T. MARTA is shifting from solely measuring customer satisfaction (CSAT), which measures overall satisfaction with services, to assessing other metrics such as ease of access, security, and quality of service quarterly.

**Recommendation #10a:** MARTA is doing an excellent job building on its current systems. The upcoming upgrade to the CRM system should make a significant difference in tracking and measuring customer feedback. In addition, KPMG recommends that MARTA consider additional key practices for measuring customer feedback:

- Multi-channel feedback collection via surveys that are distributed via email, text, websites, mobile apps, and in-person; social media monitoring that track mentions, comments, and direct messages on platforms like Twitter, Facebook, and Instagram; customer service centers that collect feedback from calls, emails, and chat interactions; and onboard and station feedback that leverages kiosks, QR codes, or physical forms to gather immediate feedback from ridership.
- Feedback management systems such as Customer Relationship Management (CRM) systems that will integrate feedback from various channels to provide a comprehensive view; and specialized feedback tools (i.e., platforms like H.E.A.T and Sprout Social) for tracking and managing social media interactions and other feedback.
- Regular reporting and analysis via key performance indicators (KPIs) such as response times, resolution times, customer satisfaction scores (CSAT), net promoter scores (NPS), and customer effort scores (CES); and trend analysis that will identify common issues and areas for improvement over time.

Further, KPMG recommends that MARTA consider additional key metrics, including:

- Customer satisfaction scores (CSAT) to measure overall satisfaction with services. Typically collected through post-interaction surveys.
- Net promoter score (NPS) to measure customer loyalty by asking how likely customers are to recommend the service to others. Responses range from 0 to 10, with promoters (9-10), passives (7-8), and detractors (0-6).
- Customer effort scores (CES) measure how easy it was for customers to resolve their issues or get the information they needed. Typically collected through follow-up surveys.
- Response and resolution times to track how quickly customer service responds to and resolves issues. Monitored across various channels, including social media, email, and phone.
- Engagement rates measure the level of interaction and feedback received from different channels and help identify which channels are most effective for customer communication.

- Service quality metrics like on-time performance (OTP) measure the percentage of services operating on schedule and cleanliness /maintenance feedback on the condition of vehicles and stations.

**MARTA Response:** MARTA agrees with this recommendation and has streamlined the Voice of the Customer (VOC) Survey to enhance efficiency and expand feedback channels. This includes the introduction of paper surveys on buses and trains, and the use of QR codes for customers to access an online version of the survey. The online VOC Survey will be promoted through social media, MARTA’s website, mobile apps, and flyers across the system. MARTA has already begun using QR codes on flyers to collect targeted feedback about rail stations. MARTA is also developing a Power BI-based dashboard to regularly report VOC Survey results. This dashboard will track ratings for all aspects of the customer journey, including CSAT and NPS, and will potentially include CES metrics currently under evaluation. Furthermore, MARTA has established a multi-departmental Voice of the Customer Advisory and Insights Team to identify common issues and areas for improvement over time. The enhanced tools will create a more seamless and frictionless travel experience for customers. The customer-facing tools, such as the new website, fare collection system, consolidated app, and updated communication signs, are designed to work synergistically to deliver a significantly improved experience with enhanced self-service options. Additionally, the new CRM platform will provide a better and more immediate understanding of customers across all service channels within the Authority. Although extensive training will be required for Customer Service staff on the new CRM system and other tools, this platform will be crucial for gaining customer insights and improving contact resolution rates. Training will be deployed across the Authority to ensure successful implementation.

## 10. Customer Experience / Service

### Real-time information access and system upgrades

**Observation #10c:** Real-time information, the Automated Fare Collection (AFC) 2.0 implementation, improving the first contact resolution rate, customer engagement and feedback tracking, the dated CRM system, and ease of access to service were described as current pain points requiring significant improvement.

**Recommendation #10c:** KPMG recommends that MARTA consider improving access by focusing on upgrading applications and systems that provide rider information and real-time updates about services, schedules, and disruptions. Current methods of tracking customer engagement and feedback through social media, the MARTA website, and the call center are inadequate. The feedback received through the website's feedback section is minimal, and tracking engagement needs improvement (i.e., first contact resolution rate) across different channels like social media and the call center. The AFC 2.0 and CRM upgrades are scheduled to go-live in December 2024 and should provide significant relief to the Customer Experience team. Efforts are underway to develop new applications, such as an upgraded "See Something Say Something" application and a replacement for the "MARTA On the Go" application. These will provide better real-time information and assist MARTA customers with better real-time access than the current systems. Customer service representatives need ongoing training to handle emerging issues and new technologies effectively. MARTA needs to develop better training programs to meet these evolving needs in a timely manner. By addressing these pain points, the Authority can expect to enhance the overall customer experience, improve operational efficiency, and better meet the needs and expectations of its riders.

**MARTA Response:** The improved tools will be designed to better aid the customer and the Authority in a more seamless and frictionless travel experience. The customer deployed tools were designed to work synergistically (new website, new fare collection, consolidated app, new communication signs) to deliver a significantly better experience through enhanced and improved self-serve items. Additionally, our backend improvements with a new CRM platform will allow us to gain better customer intelligence and immediate understanding of our customers across all service channels within the Authority. Customer Service will need significant training on the new CRM program among other tools, however, the new CRM platform will be critical for customer intelligence and improved contact resolution rates and training will be deployed throughout the Authority.

## 11. Other Specific Findings: MARTA Police Department

### Enhancing Technology Procurement and Implementation

**Observation #11b:** MARTA Police Department (MPD) proactively participates in technology conventions and conferences, aiming to identify transformative technologies for the department's processes. Despite this initiative, the procurement and implementation of such technologies are challenging due to the high acquisition costs and the Authority's extensive contracting and procurement cycle. Current policies and procedures require review and approval by multiple departments, including the Information Security, Technology, Contracts & Procurement, as well as approval by the General Manager, and the Board of Directors. Additionally, the rapid advancement of technologies, such as the use of artificial intelligence in closed-circuit television systems, makes it difficult for MPD to modernize their equipment in a timely manner and stay current with emerging technologies used by "best in class" peer transit systems and law enforcement agencies.

**Recommendation #11b:** To address the MPD's challenges in the timely procurement of transformative safety technologies, KPMG recommends that MARTA collaborate with the Information Security, Technology, Contracts & Procurement departments to develop a pre-approved vendor list with negotiated terms and rates to streamline the procurement process. Additionally, KPMG recommends that MARTA establish strategic partnerships with technology vendors that provide scalable and flexible solutions. Strategic partnerships can result in more favorable rates and terms (e.g., discounts, flexible payment options, customizable solutions). When selecting new technologies, MARTA should prioritize solutions that are scalable and flexible, allowing for incremental implementation and adaptation to changing needs over time. This approach reduces the risk and cost associated with deploying large-scale systems.

**MARTA's Response:** MPD will work with our partners in IT, Contracts and Procurement and Cyber to collaborate and produce best practices to accomplish the purchase and implementation of requested hardware and software in a suitable timeframe. A "checklist" will be implemented for all parties to complete before requisitions are requested to streamline and speed up the overall procurement process.

## Medium-Priority Recommendations

High Priority	Medium Priority	Low Priority
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1. General
<p><b>Policy needed to address requests for non-standard use of MARTA resources</b></p>
<p><b>Observation #1b:</b> The Chief Administrative Officer regularly receives requests from neighboring transit jurisdictions and community organizers to use MARTA buses for purposes beyond standard transit operations (e.g., mobile cooling stations for sporting events and road races, senior citizen group outings). While there is a current policy that prohibits MARTA from providing charter bus services, the MARTA Act does allow the Authority to provide special bus services if the request originates from a jurisdiction and is submitted via a standardized request form. These requests often remove 10-20 buses from service for regular operations, occasionally during busy commute times. Additionally, the requests may encroach on MARTA's daily four hours of down time to clean, maintain, and service buses, trains, and wayside tracks.</p>
<p><b>Recommendation #1b:</b> KPMG recommends that MARTA consider drafting a policy for Board review and approval that will set parameters on qualifying requests and allow the Department leads and staff to focus on the scope of their daily operations. For example, MARTA should define the appropriate number of days/weeks of notice required between request and event; identify the number of riders, buses, and/or trains taken out of service; determine the proximity of the event location to train stations; and assess the impact to the regular schedule and ridership. Events outside of regular business hours may be prioritized, so long as safety is not impacted. Further, MARTA may consider assessing whether jurisdictions should sponsor a portion of the costs of service. The addition of this policy will set defined boundaries and increase customer satisfaction and safety.</p>
<p><b>MARTA Response:</b> Recently Bus Operations was requested to provide input and language to the Department of Customer Experience related to a special bus request policy that was to be presented to the MARTA Board of Directors for adoption. Bus Operations presented thoughts on request and approval timeline, cost recovery methodology and periods of blackout (high peak demand) when special requests could not be considered.</p>

1. General
<p><b>Absence of a central repository for MARTA policies and procedures</b></p>
<p><b>Observation #1c:</b> During the 27 interviews conducted by KPMG during the 2024 MARTOC Management Audit, interviewees stated that their department's/business unit's policies and procedures are stored in a variety of locations, including: MARTA's intranet (Envision 360), departmental Teams sites and knowledge centers, shared drives, and the public website. There is not a single, centralized repository for the full library of the Authority's governing documents. This makes it difficult to ensure that each policy and procedure is regularly reviewed and updated by the department and subjected to regular internal audits. Furthermore, some individuals save-off local copies of documents from shared sites and refer to their desktop copies, increasing the risk that they may not be adhering to the most recent version.</p>
<p><b>Recommendation #1c:</b> KPMG recommends that the Internal Audit Department consider spearheading an initiative to inventory the Authority's full library of policies and procedures. Each department/business unit should provide a full list of their own documents. The date of the last review and/or update should be visible in the file name, on the title page, and within a revision history table. The revision history table should include columns for the revision date, version number, description of the update, author, and approver (as appropriate). Internal Audit should then validate that each business unit's documents were reviewed, or are scheduled for review, in line with the risk-based audit plan. Finally, the most recent versions of each policy and procedure should be maintained within a central repository that acts as a sole source of record for MARTA. This will enable the Internal Audit Department to view all the Authority's policies and procedures more easily, determine how recently they were updated, and proactively assess potential gaps.</p>
<p><b>MARTA Response:</b> MARTA already has a project under way to replace the current content management system (EMVision360) with a modern cloud based solution. The Internal Audit Department will consider all available methods to conduct periodic project progress verification and perform other follow up activities in compliance with the Generally Accepted Government Auditing Standards to help ensure the successful implementation of a new and contemporary content and policy management system.</p>

## 2. Rail Operations

### Operations KPIs and dashboards in alignment with industry leading practice

**Observation #2b:** MARTA maintains and publicly reports KPIs that align with industry standards for public transit organizations. Additional internal operational performance monitoring practices and metrics are in place across operations departments, including failure analyses by subsystems, facility locations, and symptom codes, to provide actionable information to management and promote performance accountability. Since 2020, MARTA has enhanced its performance monitoring through new KPIs (e.g., Rail Safety) and enhanced dashboard reports with greater drill-down into fault information including root cause analyses and location-based analyses. As reported during the audit interviews, MARTA Rail Services has expanded the use of KPIs and further enhanced the ability to drill down and understand the root causes of performance issues.

**Recommendation #2b:** KPMG recommends that MARTA continues to build on its robust performance monitoring framework by further integrating advanced data analytics and predictive maintenance technologies. This could involve leveraging machine learning algorithms to predict potential failures before they occur, thus minimizing downtime and improving service reliability. Additionally, expanding the scope of KPIs to include real-time service quality indicators could provide a more comprehensive view of operational performance. Regular training for staff on the use of these enhanced tools and metrics will ensure that the department remains proactive in addressing performance issues and maintaining high standards of service. Given that MARTA already tracks “Complaints per 100k boardings,” incorporating customer satisfaction metrics into these analyses will further enhance their ability to address and improve passenger experiences.

**MARTA Response:** MARTA engaged a consulting firm that specializes in industrial process development to enhance production planning tools through our Enterprise Asset Management software and data dashboards. With the implementation of the new railcar fleet, MARTA will implement revised PM scheduling and data analytics with advanced train technology and real-time communications. In addition, the Department of Research and Analysis is collaborating with Rail Operations to combine data from several disparate systems (a Microsoft Access database containing Rail Superintendent Log data, FASuite Rail EAM data, Rail operations data contained in a legacy system known as ORIS, and Rail operations data in MARTA's new Train Control and SCADA System) to enhance root cause analysis of Rail service interruptions. Finally, MARTA is collaborating with a researcher at Auburn University Montgomery who is applying artificial intelligence/machine learning models to accurately predict unscheduled maintenance events in MARTA buses. The results of this study may help predict potential MARTA bus failures before they occur, thus minimizing downtime and improving service reliability.

## 3. Bus Operations

### Policy needed to address requests for non-standard use of MARTA buses

**Observation #3b:** The Chief Administrative Officer regularly receives requests from neighboring transit jurisdictions and community organizers to use MARTA buses for purposes beyond standard transit operations (e.g., mobile cooling stations for sporting events and road races, senior citizen group outings). While there is a current policy that prohibits MARTA from providing charter bus services, the MARTA Act does allow the Authority to provide special bus services if the request originates from a jurisdiction and is submitted via a standardized request form. These requests often remove 10-20 buses from service for regular operations, occasionally during busy commute times. Additionally, the requests may encroach on MARTA's daily four hours of down time to clean, maintain, and service buses, trains, and wayside tracks.

**Recommendation #3b:** KPMG recommends that MARTA consider drafting a policy for Board review and approval that will set parameters on qualifying requests and allow the Department leads and staff to focus on the scope of their daily operations. For example, MARTA should define the appropriate number of days/weeks of notice required between request and event; identify the number of riders, buses, and/or trains taken out of service; determine the proximity of the event location to train stations; and assess the impact to the regular schedule and ridership. Events outside of regular business hours may be prioritized, so long as safety is not impacted. Further, MARTA may consider assessing whether jurisdictions should sponsor a portion of the costs of service. The addition of this policy will set defined boundaries and increase customer satisfaction and safety.

**MARTA Response:** Recently Bus Operations was requested to provide input and language to the Department of Customer Experience related to a special bus request policy that was to be presented to the MARTA Board of Directors for adoption. Bus Operations presented thoughts on request and approval timeline, cost recovery methodology and periods of blackout (high peak demand) when special requests could not be considered.

### 3. Bus Operations

#### Operational performance lagging behind targets

**Observation #3d:** MARTA maintains and publicly reports key performance indicators (KPIs) that align with leading industry standards for public transit organizations. In mid-CY2024, KPIs for bus operations did not meet target performance due to equipment failures such as the timing equipment that monitors the arrival and departure times and compares these times to the bus schedule. Additionally, MARTA buses receive updates to the mobile data terminal (MDT), which will allow operators to better communicate with the Bus Control Center (BCC) and receive information about issues on their routes. MARTA is also undertaking a review of the bus routes and redesigning the bus network to address underperformance on certain routes.

**Recommendation #3d:** KPMG recommends that MARTA consider replacing the faulty timing equipment on buses while also conducting root cause analysis of the issue and addressing it with the manufacturer and vendor of the equipment. If there are flaws with the design and production leading to poor quality of the equipment, MARTA should reconsider future procurement of the equipment. While new and updated MDTs may alleviate communication issues leading to poor performance of bus services on certain routes, KPMG strongly recommends that standardized training on how to operate and use updated equipment is provided to help ensure that the technology is used to its full capabilities.

**MARTA Response:** MARTA is under contract with a vendor and will replace the entire MDT system on MARTA bus fleet, including back-office and on-vehicle equipment. This new system is scheduled to start installation in CY25 and will provide accurate tracking of vehicles and accurate KPI measurements. MARTA is also working on correcting geofencing locations of bus routes and MARTA has corrected numerous bus route schedules that resulted in increased OTP percentages. MARTA's bus leadership team regularly meets with Research and Analysis, Service Scheduling, and Service Planning and are jointly addressing underperforming routes through a combination of schedule changes and larger changes included in the Bus Network Redesign program.

### 3. Bus Operations

#### Bus operator attrition post-CDL

**Observation #3e:** MARTA experiences high attrition rates of bus operators which leads to challenges with maintaining bus service levels. Bus operators often resign after obtaining a Commercial Driver's License (CDL) through MARTA for positions in the delivery and logistics industry that promise higher salaries and more robust benefit packages. Reportedly, competitors recommended that their applicants join MARTA to obtain a CDL and then reapply to their organizations.

**Recommendation #3e:** KPMG recommends that MARTA includes stipulations that are binding new recruits to bus services for a certain amount of time after receiving operator training and CDL through MARTA. This could for example be in the form of a payback requirement if new recruits leave MARTA after an initial period or in the form of a retention bonus, to be paid out after a certain number of months or years within MARTA Bus Services.

**MARTA Response:** MARTA will review the practices of peer agencies to optimize the return on investment for employer funded CDL training, such as implementing a pro-rated fee structure. This approach helps mitigate retention challenges, encourages operators to stay, and reduces turnover.

### 4. Paratransit (Mobility) Operations

#### Staffing and open vacancies

**Observation #4d:** As reported by MARTA Mobility leadership, there are open vacancies and a high need for additional staffing. The group maintains 239 vehicles while employing one (1) Maintenance Field Inspector and one (1) Operations Field Inspector. Mobility requested additional resources in the form of one (1) Mobility Operations Specialist to provide analytical oversight on operations and maintenance reports, analyze specific

component needs, and provide safety relevant insights to better understand and forecast maintenance needs and assess accident rates. Hiring a Mobility Operations Specialist constitutes a change from the previous practice under the former Mobility Services leadership, which relied heavily on mobility contractors to provide more detailed operational insights.

**Recommendation #4d:** KPMG recommends that MARTA address the staffing shortages within Mobility Services by hiring resources with additional capabilities, such as a Mobility Operations Specialist. Additional capabilities should include analytical oversight of operations and maintenance reports, analyzing specific component needs, and offering safety-relevant insights to better understand and forecast maintenance requirements and assess accident rates. By enhancing in-house skillsets with a Mobility Operations Specialist, MARTA can improve the accuracy and timeliness of operational analyses, leading to more informed decision-making and enhanced service reliability. Additionally, this approach will enable MARTA to better manage and forecast maintenance needs, reducing downtime and improving the overall performance of the Mobility Services fleet.

**MARTA Response:** MARTA Mobility is currently assessing the possibility of having an existing Support Services administrative position converted to that of Operations Specialist. Permanency of the position will be requested for the upcoming budget year.

## 5. Capital Projects

### Standardized project management of capital projects

**Observation #5b:** Five departments report to the Chief Capital Officer: CPMO, Capital Programs Delivery, Infrastructure, Planning, and Real Estate Development & Asset Management. The CPMO is responsible for risk analysis, cost analysis, schedule estimation, asset management, budget estimation, invoicing, and the associated reporting of projects spearheaded by other departments and project initiation. A recent MARTA policy subjects each project valued at \$10 million or higher to risk management by the CPMO. The same Chief is responsible for making decisions that impact organizational reporting structure of the CPMO and capital planning business units (i.e., report to the same Chief) as well as prioritization of operations over administrative functions such as project management. This may constrain functions of the CPMO when limited resources (human and technology) are directed to from performing reviews of the capital planning teams. It may negatively impact the Authority's ability to efficiently project manage capital projects.

**Recommendation #5b:** KPMG recommends that MARTA consider further integrating the CPMO's capabilities and strengths into the daily project management of capital projects. This is in line with organizational goals for CPMO support of the full capital portfolio against standardized policies and procedures that are compliant with local, state, and federal funding requirements. A more integrated CPMO will help ensure that the 70+ relevant policies and procedures are adhered to throughout the lifecycle of each capital project. It will also help improve consistent reporting across capital projects.

**MARTA Response:** The CPEI Division was restructured just over two years ago in order to prepare for the more robust needs of the capital program over the next 10 years for both expansion and state of good repair. We continue to refine this structure and optimize the performance of all parts of the division. The CPMO has been instrumental in standing up many of the processes and procedures. As the tools also advance (Oracle Cloud and Unifier) the CPMO strives to provide more consistent reporting across all projects to provide transparent information on a project's health and performance. MARTA has also identified this as well in the overall agency strategic plan.

## 5. Capital Projects

### Remaining gaps in Capital Program policies and procedures

**Observation #5c:** Efforts to improve capital delivery through the completion and/or update of policies and procedures are ongoing, with MARTA making significant progress since the 2020 MARTOC Management Audit. In the past four years, 70+ standard procedures for governance, project data, design, implementation, construction, project controls, safety, asset management, contracts, and procurement were documented. These standard procedures are maintained in a centralized Capital Program Knowledge Center and provide the foundation for consistent management and oversight of capital projects. However there remain policy and procedural gaps that need to be addressed by MARTA. While a capital delivery governance framework exists to guide each capital project's lifecycle, there is a need for the development and implementation of

organization-wide policies for risk management, quality, and asset management. Organization-wide policies would provide clear, consistent guidelines and expectations for key aspects of project execution and support more transparent lifecycle planning during each project's initiation and planning phase across the capital program portfolio. Detailed procedures pertaining to project planning, closeout, quality, environmental considerations, third-party agreements and utilities need to be established or finalized. Some procedures are in draft form or pending Unifier implementation updates.

**Recommendation #5c:**

To address the identified gaps in policies and procedures, KPMG recommends that MARTA consider the following mitigations:

- Develop and implement comprehensive policies where gaps have been identified.
- Establish standard procedures for project planning, closeout, quality assurance, environmental considerations, lessons learned, and management of third-party agreements and utilities aligned with industry leading practices that clearly define the roles and responsibilities of involved parties, consistent with other MARTA standard operating procedures. These procedures should outline the step-by-step processes to be followed and include relevant documentation requirements.
- Regularly review and update the policies and procedures to help ensure their continued relevance and effectiveness. This can be achieved through MARTA's standard two-year review cycle for procedures and periodic feedback from key stakeholders involved in capital program delivery.
- Provide training and guidance to staff members involved in capital project management and delivery to help ensure consistent understanding and application of the updated policies and procedures across the organization.
- Document and formalize procedures for capturing lessons learned from capital project planning and delivery as well as processes for monitoring the implementation of lessons learned.
- Develop procedures for asset transition and activation to improve the introduction of new vehicles into the fleet.

By implementing these recommended actions, MARTA can strengthen its overall capital delivery processes and enhance its ability to effectively manage and deliver its growing portfolio on time, within budget, and to the desired quality standards. This will support consistency and improve capacity building (including the capture of institutional knowledge and transfer) as MARTA continues to grow and develop its services and workforce.

**MARTA Response:** The CPEI team has acknowledged the need for continued development, implementation and regular reviews and updates of the policies and procedures. There are procedures that are in draft due to the growth of the program however are being formalized. The training of staff is ongoing as procedures are created and revised.

## 5. Capital Projects

### **Upcoming capital expansion program will impact the entire Authority**

**Observation #5d:** The Authority is currently undertaking the largest capital expansion program in the past 45 years to address expected deterioration from decades of use as well as unanticipated environmental challenges (e.g., high temperatures, flooding) throughout MARTA stations, corridors, and other facilities. Stage gates for schedule and reporting compliance with funding provided by the federal government are outlined in the Capital Improvement Program project governance document (located in the Capital Program Knowledge Center Teams site). Due to the \$909.2 million capital programming budget, political interests, and public-facing nature, there are operational and strategic risks that MARTA will need to identify and mitigate.

**Recommendation #5d:** To proactively address operational risks inherent in a project the size of the Capital Improvement Program, KPMG recommends that MARTA consider an "all hands-on deck" approach to the recruitment and retention of the resources needed to effectively support the capital expansion. For example, better integration of the CPMO's capabilities and strengths into the daily management of capital projects will help ensure that the 70+ relevant policies and procedures are adhered to throughout the lifecycle of each multi-year capital project. To proactively address strategic risks inherent in a political and public-facing program, KPMG recommends that MARTA consider performing periodic post-mortems and debriefs (beyond documenting lessons learned) for completed portions of the capital programs to keep project teams and executive management motivated about continuous improvement.

**MARTA Response:** The recommendation is noted and working towards integrating the CPMO's strengths and capabilities, by building the CPMO to support the lifecycle of each multi-year capital project. The CPMO is working to mitigate operational risks with an improved CPMO structure. CPEI agrees with the recommendation for more periodic debriefs of capital projects with project teams and executive leadership.

## 6. Information Technology & Security

### Need for robust IT disaster recovery plans

**Observation #6b:** Disaster recovery (DR) is tested annually. Recent reviews identified areas for improvement, and MARTA is refining these plans with the help of external partners such as the Department of Homeland Security (DHS). Recent tabletop exercises and reviews conducted with DHS revealed gaps in the current DR plan. A continuity of business plan exercise was conducted recently by a third-party, which identified the list of MARTA's business-critical systems and determined how quickly those systems need to recover from a potential disaster. MARTA is currently working with Microsoft (MS) to develop a comprehensive DR architecture using MS Azure, Microsoft's cloud environment. The third-party assessment and Microsoft discovery projects will help MARTA prepare a robust IT DR plan.

**Recommendation #6b:** KPMG recommends that MARTA consider proactively preparing for and responding to IT disruptions to minimize potential impacts on operations. This will help maintain public trust in the organization. MARTA should begin by conducting a thorough risk assessment and business impact analysis (BIA) to identify critical IT systems and evaluate the impact of their failure on operations while assessing risks such as natural disasters, cyberattacks, and hardware failures. Regular data backups to offsite locations or cloud storage are essential, with a focus on secure, encrypted backups tested regularly for integrity and recoverability. Deploying redundant hardware and network systems will help minimize single points of failure; and failover solutions can automatically switch to back-up systems if primary systems fail. Developing a comprehensive DR plan that outlines steps for recovering IT systems and data, along with clear roles, responsibilities, contact lists, and communication plans, is crucial. Regular testing and drills are important to identify gaps and improve response times, with updates to the DR plan based on lessons learned from these tests and actual incidents.

**MARTA Response:** *Risk Assessment and Business Impact Analysis (BIA):*

- Action: MARTA has initiated a comprehensive risk assessment and BIA to identify and prioritize critical IT systems. This process will evaluate the potential impact of system failures on our operations and public trust, considering risks such as natural disasters, cyberattacks, and hardware failures.

- Action: We are enhancing our backup strategy by ensuring regular data backups to offsite locations and secure cloud storage solutions. All backups will be encrypted, and we will implement regular testing for integrity and recoverability to ensure quick and seamless data restoration in the event of an IT disruption.

*Redundant Systems and Failover Solutions:*

- Action: To prevent single points of failure, we are deploying redundant hardware and network systems across key operational areas. Additionally, we are exploring automated failover solutions that will seamlessly switch to backup systems if primary systems fail.

*Comprehensive Disaster Recovery (DR) Plan:*

- Action: MARTA is in the process of developing a detailed DR plan that outlines specific steps for recovering IT systems and data. This plan will clearly define roles, responsibilities, and communication strategies to ensure effective coordination during a disruption. We will maintain an up-to-date contact list and escalation paths for quick decision-making during emergencies.

*Regular Testing, Drills, and Continuous Improvement:*

- Action: Regular disaster recovery testing, including tabletop exercises and live drills, will be conducted to assess our readiness and identify any gaps. These exercises will be followed by reviews, and our DR plan will be updated accordingly to incorporate lessons learned.

The Information Security Department acknowledges the concerns raised regarding disaster recovery (DR) and is fully committed to addressing the identified gaps. We understand the criticality of ensuring that our business-critical systems are resilient in the face of disruptions, particularly as they directly affect the safety and reliability of our operations. The partnership with the Department of Homeland Security and Microsoft's Azure cloud environment is central to our efforts in developing a robust and scalable DR architecture. We are already

refining our current DR plans based on the insights gained from recent tabletop exercises, and we appreciate the third-party assessments which have helped us map out recovery timelines for essential systems.

In support of KPMG's recommendations, The Information Security Department will immediately prioritize a comprehensive risk assessment and business impact analysis (BIA) to further evaluate the potential risks and their impacts on operations. We will also implement regular data backups to secure offsite locations and test these backups for recoverability to ensure integrity. Furthermore, redundant hardware, network systems, and automated failover solutions will be deployed to reduce single points of failure. As part of our ongoing efforts, the IT DR plan will be continuously tested and updated with clear roles and responsibilities for staff, ensuring our readiness for any potential disruption. These proactive steps are critical to maintaining public trust and strengthening our operational resilience.

## 6. Information Technology & Security

### Support for cybersecurity initiatives

**Observation #6c:** The MARTA Chief Information Security Officer (CISO) emphasized that recent support from senior leadership enhanced MARTA's cybersecurity posture. Despite progress, he notes the need for additional resources to address increased threats and the current capabilities of the cybersecurity team. The reinstatement of the NOC and SOC indicate that MARTA is prioritizing its investments in security. The Department of Information Security team continues to invest in the latest monitoring tools while making the case for additional human resources to support the cybersecurity initiatives.

**Recommendation #6c:** KPMG recommends that MARTA consider building a compelling case for additional resources by demonstrating the necessity and benefits of enhanced security measures. A key strategy to support additional IT and Security resources involves conducting a risk assessment and gap analysis that helps in developing a detailed remediation plan and highlights the benefits of improved security measures at MARTA. This strategy should include an explanation of how strengthening security can build and maintain public trust and confidence in the agency; provide data on recent security incidents, their impact, and the cost of remediation; and compare MARTA's security posture and spending to industry standards and peer organizations. Case studies and lessons learned from other agencies can be presented to highlight success stories from investing in cybersecurity tools and resources.

**MARTA Response:** The oversight committee's observation highlights the progress MARTA has made in enhancing its cybersecurity posture, additionally, underscores a critical concern that MARTA leadership continues to address which is the continued expansion of the capabilities of our cybersecurity team, despite recent support from leadership, are not fully aligned with the growing threat landscape. While the reinstatement of the NOC and SOC reflects MARTA's prioritization of security. The Information Security Department continues to address the concerns and advance this recommendation, We will continue to collaborate with relevant departments to gather incident data, evaluate the financial impact of recent security breaches, and benchmark our security posture against peer organizations. In doing so, we will also leverage industry case studies to demonstrate the value of enhanced security resources, emphasizing how these investments can maintain public trust and ensure MARTA's resilience in the face of evolving cyber threats.

## 6. Information Technology & Security

### Need for a comprehensive business continuity plan

**Observation #6d:** Business continuity plans (BCP) are tested annually as part of the disaster recovery exercise. This exercise is an extension of disaster recovery plans even though BCP can be implemented in several other IT and security incidents, such as the July 2024 CrowdStrike incident that caused several billion dollars in damage around the world. Recent reviews of the BCP at MARTA have identified as areas for improvement. For example, the infrastructure that supports MARTA's critical operations such as the integrated operating center (IOC) are not currently spread out. It is our understanding that IT is creating a comprehensive list of MARTA's applications and incorporating them into the BCP by assigning criticality factors to each application. In cases of natural disasters and catastrophic events, physical destruction of data centers can severely cripple business continuity. MARTA is considering shuffling the business-critical systems and moving some of the infrastructure to different geographical locations to avoid single points of failures.

**Recommendation #6d:** To help ensure business continuity, KPMG recommends that MARTA consider developing a comprehensive BCP that covers the operations of each department. This plan should outline procedures for maintaining essential functions during disruptions. Employee training and awareness are also vital. It is crucial to obtain input from each team on the criticality of their application(s) to prioritize the recovery order followed by outages. Regular training sessions on DR and business continuity procedures should be conducted to inform employees of their individual roles and responsibilities during an incident. An incident response team should be formed with members from IT, operations, human resources, and other key departments to coordinate recovery efforts and maintain operations. Remote work capabilities should be enabled by providing secure access to necessary systems and data, as well as ensuring that the infrastructure is robust and scalable to handle increased demand during an incident. Lastly, a public communication plan should be developed to communicate critical updates to ridership and stakeholders during and after an incident. This plan should utilize multiple channels (e.g., websites, social media, and local media) to disseminate information and updates.

**MARTA Response:** We appreciate KPMG's recommendation and are fully committed to developing a robust Business Continuity Plan (BCP) that ensures the continued operation of MARTA's essential functions during disruptions. MARTA is proactively developing a comprehensive Business Continuity Plan (BCP) to ensure essential operations continue during disruptions. This includes gathering input from all departments to prioritize recovery efforts, conducting regular employee training on disaster recovery and continuity procedures, and forming an incident response team with key department representatives. Remote work capabilities will be enhanced by providing secure access to systems and ensuring scalable infrastructure to handle increased demand during incidents. Additionally, a public communication plan will be developed to keep riders and stakeholders informed through multiple channels, ensuring transparency and maintaining public trust during disruptions.

The recent findings from the oversight committee regarding MARTA's Business Continuity Plan (BCP) underscore critical areas for improvement, particularly the need to diversify infrastructure locations to avoid single points of failure. The July 2024 CrowdStrike incident serves as a stark reminder of the potential global impact of such vulnerabilities. While it is encouraging that we are assigning criticality factors to each application and have annual disaster recovery exercises in place, we recognize the importance of extending these practices to address a broader spectrum of IT and security incidents.

In response, we will continue to prioritize the development of a comprehensive BCP that includes input from all departments to ensure the prioritization of critical applications during recovery. The Information Security Department will work closely with IT to redistribute business-critical systems across multiple geographical locations, enhancing resilience against natural and man-made disasters. Additionally, the Information Security Department will implement regular employee training and awareness sessions to clarify roles and responsibilities during incidents, ensuring all personnel are equipped to respond efficiently. A cross-functional incident response team will also be established to coordinate efforts across key departments. Additionally, we will develop a robust public communication plan leveraging multiple platforms to keep stakeholders informed during crises. These steps will significantly bolster our business continuity capabilities.

## 6. Information Technology & Security

### Need for modernizing current technologies

**Observation #6e:** MARTA's IT infrastructure needs modernization for improved efficiency and enhanced security posture, by increasingly moving the storage infrastructure to be cloud-based. Few systems within MARTA currently leverage cloud storage. Additionally, the closed-circuit television (CCTV) devices need to be upgraded. The current CCTV infrastructure is aging, having been in operation for several years. Consequently, the infrastructure is becoming increasingly unreliable, leading to frequent system failures and instances of missing or inaccessible footage. There are multiple initiatives to modernize MARTA's aging technology infrastructure, including assessing and upgrading power and cooling systems in data centers, migrating workloads to Azure cloud, and upgrading servers to the latest versions with the latest patching. Additionally, MARTA is standardizing their camera hardware, centralizing camera feeds, and exploring ways to automatically stream bus camera footage to cloud storage. They are also implementing a cloud-based

data warehouse and procuring a tool (i.e., Flexera) for asset management and versioning recommendations.

**Recommendation #6e:** KPMG recommends that MARTA consider implementing modernized tools and technology, as it is crucial for enhancing operational efficiency, improving customer experience, and ensuring long-term sustainability. MARTA has heavily invested in AFC 2.0, which will go live in the next few months and a few other system upgrades are in the pipeline but much more needs to be done to achieve better industry standards.

- To effectively modernize technology infrastructure, start with a comprehensive inventory assessment to understand existing systems and applications. Identify outdated technologies and areas where modern solutions could enhance efficiency and performance. Next, develop a strategic modernization plan by clearly defining objectives such as improved efficiency or better customer service, and ensure these goals align with the agency's mission. Prioritize initiatives based on their impact, urgency, and available resources.
- Secure funding and resources by creating a detailed budget that includes costs for modern technologies, training, and maintenance. Identify potential funding sources like government grants or public-private partnerships and allocate resources effectively to support the modernization efforts. Focus on key modernization areas such as upgrading infrastructure, adopting cloud solutions, and improving data management and cybersecurity.
- Implement advanced technologies, including internet of things (IoT) devices for real-time monitoring, artificial intelligence (AI) and machine learning for predictive analytics, and mobile applications to enhance customer experience. Foster a culture of innovation by establishing innovation labs, providing employee training, and encouraging cross-departmental collaboration.
- Engage both internal and external stakeholders to gather input and support for the modernization efforts. Develop a change management plan to guide the transition, communicate the benefits, and provide necessary training and support. Monitor progress by defining key performance indicators (KPIs), conducting regular reviews, and fostering continuous improvement. Finally, ensure that modernization efforts are scalable and future-proof, while also considering sustainability and environmental impact in technology choices.

**MARTA Response:** MARTA has already taken significant steps toward modernization; however, we recognize the need to meet industry standards and improve operational efficiency. We will start by conducting a thorough inventory assessment of our existing systems, identifying outdated technologies, and developing a strategic plan focused on enhancing performance and customer service. Our modernization efforts will prioritize upgrading infrastructure, adopting cloud solutions, improving data management, and enhancing cybersecurity. We are also exploring emerging technologies like IoT, AI, and mobile applications to further improve operational efficiency and customer experience. Securing funding and resources will be key to these efforts, and we are actively pursuing grants and partnerships to support our initiatives.

## 7. Human Resources

### Limited involvement in technology decision-making

**Observation #7b:** Although the transition to Oracle Cloud is recognized as a positive advancement for the Authority, the HR Department lost functionality and two decades of customizations in the process. This has impacted the HR Department's ability to use the system efficiently, resulted in negative end user experiences and increased manual workflows (see #7), while also slowing throughput due to the change management and training initiatives to support the implementation. Further, the temporary absence (i.e., approximately six months) of a Chief Information Officer (CIO) to spearhead initiatives to address the HR Department's existing challenges contributed to additional delays in implementing necessary technological advancements.

**Recommendation #7b:** KPMG recommends that MARTA consider providing the HR Department with some autonomy in future software procurement decisions by including them in the evaluation teams for vendor/platform technical proposals. Embedding stakeholders responsible for performing their daily operations via these systems in the Information Technology (IT) Department's review and evaluation process will encourage the procurement of tools that work well across MARTA's back office. KPMG also recommends that MARTA consider the user experience external end users (applicants) of the HR systems, as this is often the public's first impression of MARTA's technological capabilities.

**MARTA Response:** The new CIO has created HR/IT partnership meetings to discuss technical challenges experienced not only with Oracle Cloud, but other software that the department relies on daily. We have seen positive changes due to the ongoing communication regarding the needs of the department. Furthermore, HR has been included in demonstrations of new Oracle Cloud modules and discussions around the user experience.

## 8. Finance & Budget Compliance

### Reporting gaps caused by disparate finance and budget systems

**Observation #8b:** Each department under the Chief Financial Officer (i.e., Finance & Treasury, Budget & Grants, Accounting, Revenue Operations, and Contracts, Procurement and Materials) uses separate technologies for their daily operations and reporting. This was described by the Department Leads as the primary challenge in leveraging technology to support their objectives. Oracle Treasury is used by the Office of Accounting; Clearwater is used by the Office of Treasury, but there are no direct integrations between the two systems. For example, because Oracle and Hyperion are unable to receive investment information, Clearwater is leveraged for that purpose by the Office of Treasury for reporting to help create bookings for entry by the Office of Accounting into Oracle Treasury. However, there are gaps in how Clearwater interfaces with the Office of Accounting's business processes. The Office of Treasury performs manual processes so that the Office of Accounting can access the data needed for their business processes. Further exacerbating matters, while MARTA is set up as a single regional system, the four jurisdictions require separate reporting (e.g., sales tax). This makes it difficult to report out to the four jurisdictions due to the lack of algorithms within the tool and causes the team to manually back into the numbers for different funding sources. Each finance office is replacing or upgrading their legacy systems within the next three years; some as soon as the next 12-18 months, including updating the current version of Oracle ERP to Oracle Cloud which should alleviate the manual reporting manual efforts.

**Recommendation #8b:** It is KPMG's understanding that there have been incremental improvements in the Contracts, Procurement, and Materials Department to help address findings from the 2020 MARTOC Management Audit. KPMG recommends that MARTA consider how the migration to Oracle Cloud can help address the remaining gaps by involving departments reporting to the Chief Financial Officer as stakeholders in the requirements gathering and design validation sessions. The Authority should also consider application programming interfaces (APIs) to promote data consistency and quality across Oracle Cloud and legacy systems (e.g., Nextfare for AFC). These measures will support MARTA's finance and budgeting goals of a sustainable business model that can abide by their funding sources and a balanced budget every year that directs funding to the right areas. If feasible, MARTA should also consider re-escalating this to the Georgia Department of Revenue for decision on the collection and disbursement of sales tax to the four service jurisdictions (City of Atlanta, Clayton County, DeKalb County, and Fulton County) within the regional system.

**MARTA Response:** MARTA is in the process of converting to Oracle Cloud and the Finance Department has been engaged in the process from the beginning. This transition includes system integrations with several systems through APIs to limit gaps and increase accuracy, consistency, and efficiency. With respect to re-escalating the revenue disbursements of sales tax by Georgia Department of Revenue (GDOR), MARTA will reach out to our counterparts at the GDOR to request a detailed breakdown of the sales tax information by jurisdiction.

## 8. Finance & Budget Compliance

### Automation of the Office of Accounting's processes

**Observation #8c:** The Office of Accounting currently relies heavily on manual processes to complete some of their day-to-day activities. It is our understanding that the upcoming migration from the current ERP systems to Oracle Cloud will help automate these processes. However, in the interim, interviewees stated that the level of effort required to support the Oracle Cloud implementation has been difficult to balance with their department's manually intensive and time-consuming daily operations. While some resources support the implementation project full-time, their work is reallocated to colleagues who struggle to absorb the additional effort while maintaining throughput. The CFO reported that hiring external accountants to augment MARTA's daily finance operations has not been pursued due to the high-level of knowledge transfer involved in onboarding subcontractors.

**Recommendation #8c:** KPMG recommends that MARTA reconsider hiring external subcontractors on a temporary basis to augment the Accounting team both pre- and post-implementation of Oracle Cloud to address resultant growing pains and change management. The Office of Accounting should coordinate with the Human Resources Department in the recruitment and onboarding process. The suggested responsibilities of the external accountants include data entry and first-level tasks, that are reviewed and approved by Accounting team (as appropriate), document administration tasks so that MARTA employees can focus on the activities that require their institutional knowledge. MARTA should also consider contracting a subject matter expert (SME) for Oracle Cloud Finance modules with public transit experience. KPMG further recommends that MARTA make this decision in the near-term and attempt to onboard external accountants as a group so that the onboarding, training, shadowing, and reverse shadowing can be streamlined.

**MARTA Response:** MARTA will highly consider hiring external contractors. MARTA will also highly consider hiring a subject matter expert for Oracle Cloud Finance modules that has public transit experience. Both action items are time sensitive; thus, the decision on both action items will be made within the next 60 days.

## 8. Finance & Budget Compliance

### Need for formalized budget procedures

**Observation #8d:** The Department of Finance is in the process of developing several procedures that have previously not existed, including:

- Compile monthly financial highlights
- Monthly year-to-date (YTD) actual loan in Hyperion
- Create CFO annual budget forecast
- Implementing organizational change requests in Hyperion
- Power BI financial dashboard refresh
- Implementing hierarchy structure changes in Hyperion
- Operating budget transfer
- Annual operating budget multi-year upload
- Perform monthly budget to actuals analysis
- Evaluating position requisition
- Develop the proposed budget books
- OCR process
- Compilation of adopted budget book
- Develop annual operating budget
- Create annual call package
- Troubleshooting invoice/payment issues
- Annual budget load in Oracle
- Process change control/budget changes in Oracle
- Approve project charters in Unifier and Oracle
- Encumbrance reporting in Oracle and Power BI
- Fund availability reporting in Oracle

Some of these procedures are manual processes that bridge the interactions between disparate systems and automated workflow; some are required by MARTA; and others are role-specific processes necessary to perform their duties. KPMG also identified a gap in documented procedures related to the budgeting and accounting controls that can be suspended (i.e., notifications of suspension / reactivation, overrides, workflow, etc.) that have previously resulted in unbalanced line items.

**Recommendation #8d:** KPMG recommends that the Budgets & Grants Department collaborate with the CFO to assign priorities and owners to the list of incomplete procedures described above. The platform (i.e., Hyperion, Oracle, Unifier, desktop) and frequency (e.g., monthly, quarterly, annually) should be considered when determining whether near-term, medium-term, or long-term due dates are appropriate. The aim is to document the missing procedures without negatively impacting departmental performance. Additionally, MARTA should consider integrating their finance and budgeting objectives and key results (OKRs) into these procedures to promote adherence to organizational goals.

**MARTA Response:** MARTA agrees with the recommendation to assign desk procedure development and due dates as recommended. Additionally, several of these will be assigned service level expectations to support the OKR framework.

<b>10. Customer Experience / Service</b>
<b>Customer service tools and technology</b>
<b>Observation #10b:</b> There is a focus on using technology to anticipate customer needs before issues arise. The goal is to shift customer relationships from transactional to emotional, integrating services into customers' lifestyles.
<b>Recommendation #10b:</b> KPMG recommends that MARTA consider enhancing self-service options and shifting the overall approach to customer service from reactive to proactive. By investing in improved self-service technologies, MARTA will enable their customers to access information and resolve issues independently. MARTA should evaluate these tools for user-friendliness, ease of use, and the ability to integrate them with other support systems to provide seamless assistance.
<b>MARTA Response:</b> MARTA agrees with the recommendation and is committed to enhancing self-service options as part of a broader shift from reactive to proactive customer service. Our plan is to launch an innovative technology suite designed to work cohesively, offering customers tools to navigate the MARTA system with ease. The team is developing and accessing customer journeys across various rider segments and is planning execution of several key improvements and upgrades: a redesigned website, an upgraded fare payment system, a unified mobile app, and enhanced digital signage at stations, stops, and across all transportation modes. These initiatives are focused on delivering a frictionless, user-friendly experience, allowing customers to access information and resolve issues independently.

<b>10. Customer Experience / Service</b>
<b>Data integration and utilization</b>
<b>Observation #10e:</b> MARTA's ability to track the effectiveness and engagement levels of different feedback channels is currently limited.
<b>Recommendation #10e:</b> KPMG recommends that MARTA consider more fully integrating social media interactions and other feedback channels into the main Customer Relationship Management (CRM) system, which is scheduled to go-live in late CY2024. MARTA should continue their efforts to embed customer-centric thinking into each department and business unit so that each team considers the customer impacts of their operations. MARTA should provide training and resources to support this culture shift towards a more unified customer experience approach.
<b>MARTA Response:</b> MARTA agrees with the recommendation and is committed to enhancing our ability to track and manage customer feedback more effectively. Our new CRM system, scheduled to go live at the end of CY2025, will provide a robust platform for capturing, categorizing, and analyzing rider interactions across all channels, including social media, customer call-ins, and text messages. This system will allow us to better understand rider patterns and "pain points", and tailor our responses to meet their needs more effectively. By optimizing communication across all feedback channels, we aim to improve the timeliness and relevance of our customer engagement. The CRM integration will be supported by the integration of the customer satisfaction surveys and other feedback mechanisms to track both lead and lag indicators of our performance, allowing us to measure the effectiveness of our actions and continuously improve the customer experience.

<b>11. Other Specific Findings: Safety &amp; Quality Assurance</b>
<b>Advancing MARTA's safety and compliance with Origami Risk system integration</b>
<b>Observation #11a:</b> Although the Department of Safety & Quality Assurance (DSQA) utilizes InVision360 for real-time safety monitoring, Power BI for data visualization and analysis, SharePoint for document management and collaboration, and Origami Risk system for data management, the department lacks access to information collected by other departments in disparate systems. While each tool plays a crucial role in data tracking and management, the DSQA needs enhanced data integration and analytics capabilities to develop a clear understanding of safety and compliance data across MARTA. Per the Agency Safety Plan, eight areas (bus operations, rail operations, streetcar operations, paratransit (mobility) operations, rail service control center, risk management, and MARTA Police Department) are responsible for safety metrics and compliance.

**Recommendation #11a:** It is our understanding that the DSQA submitted a request to the MARTA Board of Directors related to the procurement of Origami modules for risk management and historical compliance information. KPMG recommends that MARTA consider integrating its current technological solutions—InVision360, Power BI, and SharePoint—with the Origami modules to create a unified data ecosystem. This integration will enable streamlined data access across departments and enhance DSQA's risk management and compliance tracking capabilities. By leveraging a holistic view of data across these eight areas of operations, MARTA can improve decision-making, optimize resource allocation, and elevate its safety and quality standards. This approach is aligned with leading practices in data management and interdepartmental collaboration, fostering a proactive and comprehensive safety culture.

**MARTA Response:** While DSQA agrees with the recommendation #11A, DSQA could also benefit from exploring technology that collects additional data that capture changing system characteristics and real-time operational performance e.g., vehicle telematics, route design and hazards, operator behavior and rules compliance. EmVision360 houses MARTA's baseline documents (drawings, plans, procedures, and policies, etc.). This platform tracks and maintains all updates and changes to those documents. MARTA has initiated a plan to replace EmVision360 within the next calendar year.

## Low-Priority Recommendations

High Priority	Medium Priority	Low Priority
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### 2. Rail Operations

#### Rail Operations and Maintenance policies and procedures

**Observation #2a:** Policies and procedures for Rail Operations and Maintenance are in place to promote safe and effective operations of transit service and the maintenance of facilities, vertical transportation, vehicles, and maintenance-of-way. Each department has an overall program for preventive maintenance, in addition to plans for maintenance and replacement of assets informed by asset performance data. Procedures are reviewed at least every two years, with policies reviewed and updated on an as-needed basis. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.

**Recommendation #2a:** KPMG recommends that MARTA maintain a dedicated repository for the procedures related to operations and maintenance of bus and rail assets, non-revenue vehicles, and facilities, including vertical transportation. This repository should enable MARTA to quickly access relevant documents and assess the need for review and updates at the defined 24-month intervals.

**MARTA Response:** We currently have a repository that houses this information. We will educate/train all members of management (Superintendents and above) on where this is housed and ensure they know how it is used.

### 3. Bus Operations

#### Bus Operations & Maintenance policies and procedures

**Observation #3c:** Policies and procedures for Bus Operations and Maintenance are in place to promote safe and effective operations of transit service and the maintenance of facilities, vertical transportation, vehicles, and maintenance-of-way. Procedures are reviewed at least every six months, with policies reviewed and updated as needed. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.

**Recommendation #3c:** KPMG recommends that MARTA maintain a dedicated repository for the procedures related to operations and maintenance of bus and rail assets, non-revenue vehicles, and facilities, including vertical transportation. This repository should enable MARTA to quickly access relevant documents and assess the need for review and updates at the defined six-month intervals.

**MARTA Response:** 100% of the SOPs for the Bus Operations were reviewed and completed during a Biennial Audit conducted in July-October 2023. In addition to the Biennial Review, 35 SOPS were selected in April 2024 for a six-month random compliance review to ensure SOPs are reviewed prior to the next Biennial review. The Operations division works closely with DSQA and the Configuration Team during the review process. The DSQA assesses for any possible hazards and has the final approval of the SOPs before they are published for MARTA employees in our repository, emVision360, managed by the Configuration Management team. The Configuration Management team also archives and controls the documents to ensure the latest versions are used for any update and uploaded into emVision360. Detailed information regarding the SOP management process can be found in OP-SOP-1001.

#### 4. Paratransit (Mobility) Operations

##### Ridership increases due to aging population and rising disability rates

**Observation #4b:** As reported by Mobility Services leadership, the ridership increase was accompanied by an increase in eligibility applications and approvals for Mobility Services. This is reportedly due to an overall aging population and increased disability rates among the population within MARTA's four jurisdictions: City of Atlanta, DeKalb County, Fulton County, and Clayton County.

**Recommendation #4b:** KPMG recommends that MARTA continue to expand its fleet capacity by procuring higher occupancy and fully accessible vehicles to accommodate the increasing number of passengers with disabilities. This expansion will help alleviate pressure on existing services and ensure that all passengers have access to reliable transportation. Additionally, enhancing the eligibility and application processes will streamline access to services, making it easier for individuals to apply and receive timely approvals. KPMG recommends that MARTA invests in improving customer support by establishing a dedicated team to assist passengers with disabilities and offering comprehensive training programs for staff will ensure high-quality service delivery and address specific needs effectively. Furthermore, engaging with the disability community and collaborating with local organizations and advocacy groups will help MARTA align its services with the unique requirements of passengers with disabilities, fostering a more inclusive transit system. KPMG recommends that MARTA invests in promoting awareness and education through public campaigns and staff training will raise awareness about the importance of accessibility and inclusivity. These initiatives will help create a more understanding and supportive environment for all passengers, ensuring that MARTA's services are accessible and welcoming to everyone. By implementing these recommendations, MARTA can better support the rising demand for accessibility and disability services, enhancing overall passenger satisfaction and service efficiency.

**MARTA Response:** A procurement is currently underway to add additional minivans and full-sized vans to the fleet in FY25. Also, MARTA's fleet replacement plan includes long-term procurement to replace approximately 20% of the existing fleet annually; the associated RFP is being prepared. Regarding eligibility assessments, the scope of work associated for the upcoming solicitation of [eligibility assessments] services will include more stringent training requirements for assessors to guarantee requisite qualifications are met to ensure acumen and propriety for assessments and granting/denying eligibility. Additionally, MARTA implemented an online application platform in 2022 which enhanced the application process. With the upcoming software expected to launch in FY25, additional innovation will be implemented to bolster the application submission and status tracking process, record keeping, customer interface, etc. Lastly, MARTA [Mobility] will maintain and Strengthen, where needed, partnerships with the disability community (e.g., MARTA Accessibility Committee, Bobby Dodd Institute, Disability Link, Covenant House, Shepherd Center, Atlanta Public and Dekalb County School Systems, etc.) to help align services and promote awareness.

#### 5. Capital Projects

##### Inconsistent use of Unifier

**Observation #5e:** MARTA implemented Oracle Primavera Unifier / Unifier Accelerator ("Unifier") as the project management information system (PMIS) for capital projects, serving as a centralized repository for project information and providing a comprehensive solution for project management needs. However, the implementation of this solution has presented the Authority with a few issues. For instance, CPMO can only report on spend to date and not progress, some departments do not have access to Unifier or do not use Unifier consistently, and the reporting tool's capabilities are limited. To mitigate the lack of reporting tools

offered by Unifier, certain reporting tools are being developed, specifically for the Capital Programs, Expansion & Innovation (CPEI) Division. The lack of functionality impacts CPMO by hampering the optimization of project planning and delivery, especially in setting KPIs for the Capital Program, and limits MARTA's ability to fully leverage project data to inform decision-making and mitigate project performance risks. While Unifier is the primary capital project performance reporting tool for MARTA, there are certain components of project management documentation not available on the Unifier platform. Essential documents such as standard operating procedures (SOPs) and design criteria are located in a separate, centralized Capital Programs Knowledge Center Microsoft SharePoint repository. Currently, CPMO's reporting is limited to schedule and milestone completion dates. Current FTA requirements for cost allocation and resource allocation metrics are not performed within the tool due to system limitations; rather, the CPMO relies on workarounds to collect and report this information. CPMO is not able to generate system reports on key metrics such as scope creep and scope control measures. Furthermore, the number of Unifier licenses owned by MARTA is fixed at 400 for use by the CPMO, Capital Programs Delivery, Infrastructure, Planning, and Real Estate Development & Asset Management departments as well as external contractors, design teams, operations, safety, security, accounting, and information technology (IT).

**Recommendation #5e:** To address the limitations identified regarding the use of Unifier and access to the Knowledge Center, KPMG recommends that MARTA consider the following mitigations:

- Provide Unifier access to the Planning group (and other groups as appropriate) within MARTA. This will enable the teams to fully leverage the capabilities of Unifier in project planning and delivery, allowing for data-driven decision-making based on a single system of record. Each project stakeholder should be granted access to Unifier and be able to integrate their processes with the workflows.
- Continue with the development of reporting tools within Unifier and expand the requirements of the reports to include the establishment of processes for collecting, analyzing, and reporting data to track KPIs. Integrate relevant project management documentation, including SOPs and design criteria, into the Unifier platform to centralize project documentation, streamline access for project stakeholders, and eliminate the need for separate systems. While key processes and procedures are built into the Unifier implementation, in the interim, CPEI should expand access to the Knowledge Center and provide guidance on the location of information and documents to a wider group of stakeholders.
- Conduct regular, user-specific Unifier training sessions for the Planning group (and others as appropriate), reinforcing the use of Unifier and its features for project planning, performance monitoring, and reporting. This will help ensure that team members are proficient in effectively utilizing the platform to its full potential.
- Regularly review and update the Unifier platform to incorporate necessary enhancements or modifications based on end user feedback. This continuous improvement process will contribute to the platform's effectiveness in supporting MARTA's project management needs.

Implementing these recommendations will support the expansion and reinforcement of consistent usage of Unifier as a valuable tool for data-based decision-making and project performance management and will enhance the overall efficiency and effectiveness of MARTA's capital projects by ensuring that project planning, execution, and reporting are based on accurate, consistent, and easily accessible data and standardized workflows.

**MARTA Response:** Unifier has been the PMIS of record for the past five years and has been fully developed, with continued enhancements this year; including integration of processes for collecting and analyzing data. Training is continuous for all groups on the functionality of the system, including reporting. The efforts are ongoing for the entire CPEI department to work in the system effectively and to provide access to project data and information.

## 7. Human Resources

### Maximizing the potential of Power BI Dashboards

**Observation #7c:** The Human Resources Department leverages Power BI dashboards to track, monitor, and report high-level information related to headcount, salary information, as well as trends with new hires and attrition. They also pull lower-level details on the demographics of active employees to inform decision-making for transit routes that best serve MARTA’s workforce during their commutes and ensuring that the location of health care clinics compatible with medical benefits offered by the Authority are in close proximity to neighborhoods heavily populated by employees.

**Recommendation #7c:** KPMG recommends that the Human Resources Department consider exploring the capabilities of the Power BI tool and expanding their use by drilling down into lower-level key performance indicators (KPIs) and employee demographics. For example, reporting on the education level breakdowns of the current workforce to inform recruiting methods and locations may yield an increase in the qualified and diverse applicant pool. MARTA should determine which KPIs and metrics are most meaningful to leadership, so that the HR department can provide clear and consistent information that supports data-driven decisions by the C-Suite in alignment with organizational goals.

**MARTA Response:** All HR managers have been trained to access the Power BI dashboard, and the HR team regularly reviews the data together during HR leadership meetings. However, there is potential for improvement in analyzing the data more deeply and drilling down to develop strategies for addressing HR challenges, particularly in recruitment and retention.

## 8. Finance & Budget Compliance

### Need to document policies and procedures for bond sales

**Observation #8a:** Recently, MARTA earned triple-A (AAA) bond ratings from the Kroll Bond Rating Agency and Standard & Poor’s (S&P) Global Ratings as well as an AA+ rating from Fitch Ratings. These high bond ratings enables the Authority to secure low interest rates and are indicative of strong fiscal management. Per MARTA General Manager and CEO, “an AAA rating underscores the strength of our long-term revenue growth, substantial and growing reserve balances, and shows we are well-positioned to increase our competitiveness for federal funding and meet the expansion commitments made to our jurisdictional partners.” Interviews with Department Leads reporting to the Chief Financial Officer indicated that the current documentation for bonds may not cover the Authority’s evolving Environmental, Social, and Governance (ESG) sustainability commitments (i.e., green bonds). For example, green bond sales have annual reporting requirements to notify the public of the health of the bonds.

**Recommendation #8a:** KPMG recommends that MARTA consider documenting end-to-end procedures and workflow for bonds, from sale to reporting. These procedures should include a RACI matrix detailing the roles and responsibilities of involved parties, incorporate the reporting and legal review schedule, describe the internal controls, and be reviewed periodically for compliance with elements that are required to be disclosed to the public. The Authority should consider documenting nuances to the RACI that vary based on bond type (e.g., waste and recycling metrics for green bonds). Rather than desktop procedures that are built transaction-by-transaction, these documents should be saved in a centralized repository accessible by the CFO Departments, Legal Departments, and the Sustainability Department. This will reduce the volume of position papers authored by MARTA to justify straying from the policy.

**MARTA Response:** MARTA agrees with the recommendation and will create a Treasury Guide to include a RACI Matrix to walk through the steps from pre-sale of the bonds through disclosure and reporting requirements. The guide will be inclusive of the opportunity to utilize investors in the environmental, social and governance markets. The guide will be completed in the next by January 30, 2025.

## 10. Customer Experience / Service

### Communication and response

**Observation #10d:** While social media engagement is monitored and responded to, the effectiveness of these responses outside of business hours is not fully captured. Low engagement through the website’s feedback section and/or inbound calls to the Customer Service Center indicate a potential gap in customer communication preferences.

**Recommendation #10d:** KPMG recommends that MARTA consider broadening data collection and analysis by developing comprehensive key performance indicators (KPIs) that capture engagement across channels, including social media and website feedback. Additional details are listed within 'Recommendation #10a'. MARTA should utilize the collected data from various channels to identify trends, common issues, and areas needing attention to help ensure continuous improvement in service delivery.

**MARTA Response:** MARTA agrees with this recommendation and has streamlined the Voice of the Customer (VOC) Survey to enhance efficiency and expand feedback channels. This includes the introduction of paper surveys on buses and trains, and the use of QR codes for customers to access an online version of the survey. The online VOC Survey will be promoted through social media, MARTA's website, mobile apps, and flyers across the system. MARTA has already begun using QR codes on flyers to collect targeted feedback about rail stations. MARTA is also developing a Power BI-based dashboard to regularly report VOC Survey results. This dashboard will track ratings for all aspects of the customer journey, including CSAT and NPS, and will potentially include CES metrics currently under evaluation. Furthermore, MARTA has established a multi-departmental Voice of the Customer Advisory and Insights Team to identify common issues and areas for improvement over time. The enhanced tools will create a more seamless and frictionless travel experience for customers. The customer-facing tools, such as the new website, fare collection system, consolidated app, and updated communication signs, are designed to work synergistically to deliver a significantly improved experience with enhanced self-service options. Additionally, the new CRM platform will provide a better and more immediate understanding of customers across all service channels within the Authority. Although extensive training will be required for Customer Service staff on the new CRM system and other tools, this platform will be crucial for gaining customer insights and improving contact resolution rates. Training will be deployed across the Authority to ensure successful implementation.

# 1. General Observations

The Authority’s current operating model was designed in the twentieth century when public transit systems were constantly growing to meet the demands of urban sprawl and increased ridership by daily commuters. The policies and procedures that inform this model require periodic adjustments and advancements to better align work processes, systems, and organizational structures that will enable the Authority to drive efficiencies and execute on their growth strategies and goals. With a more relevant operating model informed by updated policies and procedures as well as renewed dedication to success and continuous improvement, MARTA will continue to see return on investment, greater efficiency, and long-term sustainability as a “best in class” transit system.

Sections 2 through 10 provide the outputs of KPMG’s observations and recommendations related to each specific core area. Via interviews, documentation reviews, and analysis, KPMG identified findings and recommended mitigations that span multiple functional areas and are applicable to the broader Authority. These observations are included within this section.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
<b>1. General</b>		
<b>Difficult to communicate with field operators via email</b>		
<p><b>Observation #1a:</b> Business units under the Chief Administrative Officer (i.e., Human Resources, Diversity &amp; Inclusion, Employee &amp; Labor Relations) are responsible for communicating with the Authority’s entire workforce, including employees operating in the field or from satellite locations other than MARTA headquarters. These business units have challenges engaging employees with non-office-based jobs because the main channel of departmental communication is MARTA email accounts. This challenge was also expressed by the IT Department; since email accounts are locked after periods of inactivity (30 or 60 days), the IT Service Desk spends significant amount of time re-establishing accounts and resetting passwords for infrequent users. Email as the primary form of communication across the Authority creates barriers to effective communication and negatively impacts the timely dissemination of critical updates and information to all employees.</p>		
<p><b>Recommendation #1a:</b> To reach a broader range of employees, KPMG recommends that MARTA consider alternate forms of official communication to augment email correspondence to MARTA email accounts. Certain employee demographics should be able to indicate their preference for alternate methods of communication so that they remain engaged. Based on the sensitivity of the information within the update, MARTA should consider leveraging social media (e.g., posts within restricted Facebook Groups and/or LinkedIn Groups), bulletins on the public MARTA website, paper flyers in break rooms at MARTA facilities, and mailed newsletters of upcoming policy changes and events. Further, KPMG recommends that Information Security and Technology Departments consider reviewing the current policy for allowing MARTA domain emails to be accessed on personal devices. Enabling employees to view work emails from privately-owned phones, tablets, and computers would increase viewership of key updates by field operators.</p>		
<p><b>MARTA Response:</b> MARTA will consider alternate forms of official communication to augment email correspondence to MARTA email accounts. We will review, and update if necessary, security, technology and human resource policies regarding the use of personal communications devices to access the MARTA domain. Security will take precedent as we consider alternate methods to access email accounts.</p>		

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<b>1. General</b>
<b>Policy needed to address requests for non-standard use of MARTA resources</b>
<p><b>Observation #1b:</b> The Chief Administrative Officer regularly receives requests from neighboring transit jurisdictions and community organizers to use MARTA buses for purposes beyond standard transit operations (e.g., mobile cooling stations for sporting events and road races, senior citizen group outings). While there is a current policy that prohibits MARTA from providing charter bus services, the MARTA Act does allow the Authority to provide special bus services if the request originates from a jurisdiction and is submitted via a standardized request form. These requests often remove 10-20 buses from service for regular operations, occasionally during busy commute times. Additionally, the requests may encroach on MARTA's daily four hours of down time to clean, maintain, and service buses, trains, and wayside tracks.</p>
<p><b>Recommendation #1b:</b> KPMG recommends that MARTA consider drafting a policy for Board review and approval that will set parameters on qualifying requests and allow the Department leads and staff to focus on the scope of their daily operations. For example, MARTA should define the appropriate number of days/weeks of notice required between request and event; identify the number of riders, buses, and/or trains taken out of service; determine the proximity of the event location to train stations; and assess the impact to the regular schedule and ridership. Events outside of regular business hours may be prioritized, so long as safety is not impacted. Further, MARTA may consider assessing whether jurisdictions should sponsor a portion of the costs of service. The addition of this policy will set defined boundaries and increase customer satisfaction and safety.</p>
<p><b>MARTA Response:</b> Recently Bus Operations was requested to provide input and language to the Department of Customer Experience related to a special bus request policy that was to be presented to the MARTA Board of Directors for adoption. Bus Operations presented thoughts on request and approval timeline, cost recovery methodology and periods of blackout (high peak demand) when special requests could not be considered.</p>

<b>1. General</b>
<b>Absence of a central repository for MARTA policies and procedures</b>
<p><b>Observation #1c:</b> During the 27 interviews conducted by KPMG during the 2024 MARTOC Management Audit, interviewees stated that their department's/business unit's policies and procedures are stored in a variety of locations, including: MARTA's intranet (Envision 360), departmental Teams sites and knowledge centers, shared drives, and the public website. There is not a single, centralized repository for the full library of the Authority's governing documents. This makes it difficult to ensure that each policy and procedure is regularly reviewed and updated by the department and subjected to regular internal audits. Furthermore, some individuals save-off local copies of documents from shared sites and refer to their desktop copies, increasing the risk that they may not be adhering to the most recent version.</p>
<p><b>Recommendation #1c:</b> KPMG recommends that the Internal Audit Department consider spearheading an initiative to inventory the Authority's full library of policies and procedures. Each department/business unit should provide a full list of their own documents. The date of the last review and/or update should be visible in the file name, on the title page, and within a revision history table. The revision history table should include columns for the revision date, version number, description of the update, author, and approver (as appropriate). Internal Audit should then validate that each business unit's documents were reviewed, or are scheduled for review, in line with the risk-based audit plan. Finally, the most recent versions of each policy and procedure should be maintained within a central repository that acts as a single source of record for MARTA. This will enable the Internal Audit Department to view all the Authority's policies and procedures more easily, determine how recently they were updated, and proactively assess potential gaps.</p>

**MARTA Response:** MARTA already has a project under way to replace the current content management system (EMVision360) with a modern cloud based solution. The Internal Audit Department will consider all available methods to conduct periodic project progress verification and perform other follow up activities in compliance with the Generally Accepted Government Auditing Standards to help ensure the successful implementation of a new and contemporary content and policy management system.

## 2. Rail Operations

### Overview

The Department of Rail Operations plays a pivotal role in managing the seamless and effective functioning of MARTA's public transportation rail system. This department consists of six offices, each dedicated to a specific segment of rail operations.

The department is led by the Deputy Chief of Rail Operations, responsible for the overarching strategy and coordination of the activities that meet the department's objectives.

The operational framework further delineates into geographical sectors with the Office of Rail Services North South Line and the Office of Rail Services East West Line. The Office of Facilities is responsible for maintenance and custodial operations for MARTA facilities (including rail yards, stations, and headquarters), vertical transportation (elevators and escalators), and right of way components associated with the Authority's rail system. The Office of Vertical Transportation is tasked with the management of elevators, escalators, and related systems. The Office of Rail Services orchestrates the daily operations across the MARTA rail system, delivery of services, customer satisfaction, and the operational efficacy of rail services.

Recently, the Division of Rail Operations became responsible for operating and maintaining the Atlanta Streetcar light rail fleet, along with its associated facilities and infrastructure.

MARTA has several plans to improve its rail services in the coming years, focusing on performance issues and ridership development, including:

- **MARTA 2040 Project:** This long-term plan includes various projects aimed at enhancing the rail system's capacity and reliability. Key projects include upgrading the public address system, electronic signage, and station facilities. These upgrades are designed to improve the overall passenger experience and operational efficiency.
- **Transit-oriented development (TOD):** MARTA is promoting TOD projects to boost economic growth and increase ridership. These developments are strategically located near rail stations to encourage the use of public transit and connect communities.
- **Service adjustments and expansions:** MARTA is planning new rail services, such as the light rail on the Atlanta BeltLine and the Clifton Corridor. These expansions aim to provide better connectivity and meet the growing demand for public transit in the Atlanta area.
- **Performance monitoring:** MARTA continuously monitors key performance indicators to address issues like staffing shortages and equipment maintenance. This helps maintain consistent and reliable rail services.

These initiatives are part of MARTA's broader strategy to enhance the rail network and provide a better transit experience for its users.

MARTA monitors the performance of Rail Operations through four public-facing KPIs:

- On-time performance (OTP)
- Mean distance between failures (MDBF)
- Mean distance between service interruptions
- Complaints per 100,000 boardings

In Fiscal Year (FY) 2023, the OTP for rail was 96.8%, exceeding the target of 95%. The FY2023 mean distance between service interruptions was 475.1, slightly higher than the target of 475 miles. Rail services successfully came in below the target of 1.00 complaints per 100,000 boardings.

For FY2024, MARTA aims to enhance operational efficiency by rolling out updated Operating Department manuals and Standard Operating Procedures, providing special services for large-scale events, and reducing Station Services overtime to stay within budget. MARTA plans to fill open vacancies for various positions, support key projects like TRIV and Tunnel Ventilation, and maintain an OTP goal of 90%. Additionally, MARTA seeks to establish a long-term contract with Siemens for overhauls, technical support, and spare parts for Light Rail Vehicles.

As per internal policy, rail operators are required to obtain a certification from the Bus Service department before starting their training to become rail operators. This means that all rail operators are dually qualified, which allows for staff transfers and resource sharing.

Through documentation reviews and interviews with key stakeholders and decision makers, KPMG performed the following tasks related to Rail Operations as part of this Management Audit:

- Determine the existence and effectiveness of policies and procedures to help ensure MARTA's compliance with the MARTA Act and applicable Federal Transit Administration (FTA) and GDOT regulations and requirements, and the achievement of MARTA's organizational objectives.
- Evaluate how the Rail Operations Department monitors its performance and effectiveness.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
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2. Rail Operations
<b>Rail Operations and Maintenance policies and procedures</b>
<b>Observation #2a:</b> Policies and procedures for Rail Operations and Maintenance are in place to promote safe and effective operations of transit service and the maintenance of facilities, vertical transportation, vehicles, and maintenance-of-way. Each department has an overall program for preventive maintenance, in addition to plans for maintenance and replacement of assets informed by asset performance data. Procedures are reviewed at least every two years, with policies reviewed and updated on an as-needed basis. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.
<b>Recommendation #2a:</b> KPMG recommends that MARTA maintain a dedicated repository for the procedures related to operations and maintenance of bus and rail assets, non-revenue vehicles, and facilities, including vertical transportation. This repository should enable MARTA to quickly access relevant documents and assess the need for review and updates at the defined 24-month intervals.
<b>MARTA Response:</b> We currently have a repository that houses this information. We will educate/train all members of management (Superintendents and above) on where this is housed and ensure they know how it is used.

2. Rail Operations
<b>Operational KPIs and dashboards in alignment with industry leading practices</b>
<b>Observation #2b:</b> MARTA maintains and publicly reports KPIs that align with industry standards for public transit organizations. Additional internal operational performance monitoring practices and metrics are in

place across operations departments, including failure analyses by subsystems, facility locations, and symptom codes to provide actionable information to management and promote performance accountability. Since 2020, MARTA enhanced its performance monitoring through new KPIs (e.g., Rail Safety) and improved dashboard reporting by enabling greater drill-down into fault information including root cause and location-based analyses. As reported during the interviews, MARTA Rail Services expanded its use of KPIs and further enhanced the ability to drill-down and understand the root causes of performance issues.

**Recommendation #2b:** KPMG recommends that MARTA continue to build upon its robust performance monitoring framework by further integrating advanced data analytics and predictive maintenance technologies. This could involve leveraging machine learning algorithms to predict potential failures before they occur, thus minimizing downtime and improving service reliability. Additionally, expanding the scope of KPIs to include real-time service quality indicators could provide a more comprehensive view of operational performance. Regular training for staff on the use of these enhanced tools and metrics will help ensure that the department remains proactive in addressing performance issues and maintaining high standards of service. Given that MARTA already tracks “complaints per 100,000 boardings,” incorporating customer satisfaction metrics into these analyses will further enhance the Authority’s ability to address and improve passenger experience.

**MARTA Response:** MARTA engaged a consulting firm that specializes in industrial process development to enhance production planning tools through our Enterprise Asset Management software and data dashboards. With the implementation of the new railcar fleet, MARTA will implement revised PM scheduling and data analytics with advanced train technology and real-time communications. In addition, the Department of Research and Analysis is collaborating with Rail Operations to combine data from several disparate systems (a Microsoft Access database containing Rail Superintendent Log data, FASuite Rail EAM data, Rail operations data contained in a legacy system known as ORIS, and Rail operations data in MARTA's new Train Control and SCADA System) to enhance root cause analysis of Rail service interruptions. Finally, MARTA is collaborating with a researcher at Auburn University Montgomery who is applying artificial intelligence/machine learning models to accurately predict unscheduled maintenance events in MARTA buses. The results of this study may help predict potential MARTA bus failures before they occur, thus minimizing downtime and improving service reliability.

## 2. Rail Operations

### Rail Operations Staffing Challenges

**Observation #2c:** MARTA Rail Operations experiences similar staffing challenges to other operational departments, impacting the efficiency and reliability of rail services. Rail Operations leadership reported several open vacancies and absenteeism. MARTA possesses a unique requirement that rail operators start their careers within MARTA Bus Services before training to become rail operators. It was reported that trainees that fail rail service testing or become disqualified due to low attendance metrics often revert to bus services. As operators obtain more seniority it may become beneficial to move between bus and rail operation due to their dual qualification. This can occur during the quarterly ‘mark-up,’ MARTA’s operational shift and staff planning period.

**Recommendation #2c:** KPMG recommends that MARTA implement targeted strategies to address staffing challenges and improve service efficiency and reliability. This includes developing targeted recruitment campaigns to fill open vacancies and implementing retention strategies to reduce absenteeism and turnover. Additionally, providing extra training and support for trainees can improve success rates in rail service testing and attendance, reducing the number of trainees reverting to bus services. Continuing the incentive programs to reward attendance and performance will further encourage operators to maintain high standards and reliability. By addressing these areas, MARTA can enhance the efficiency and reliability of its rail services, providing better service for its passengers. MARTA leadership should investigate and quantify the issues around operator transfers during the quarterly ‘mark-up.’ If it is found to be a significant issue, the terms of the Collective Bargaining Agreement, which governs rail and bus operators within MARTA, should be changed during the next negotiation cycle. It is important to involve a cross-section of stakeholders in the review and revision of this policy to ensure alignment and concurrence with the changes.

**MARTA Response:** MARTA is working on developing and implementing a dedicated line instructor program for Rail Training, to better assist Rail Operator Candidates to improve the pass rate and retention for candidates. MARTA currently has an attendance incentive program which was enhanced to a quarterly bonus during the last collective bargaining agreement. In addition, MARTA management team is currently discussing the issues and difficulties surrounding the Rail Operators transferring back and forth to Bus during Mark-Up. As this issue is specifically governed by the collective bargain agreement, MARTA is planning to address this topic during the next Union Negotiations.

# 3. Bus Operations

## Overview

MARTA operates the primary public transportation network in the Atlanta metropolitan area, providing both bus and rail services. The bus services offered by MARTA are a crucial component of Atlanta's transportation infrastructure, serving many areas not covered by the rail system and providing vital connections between various communities and the rail network.

The Bus Services Department is tasked with operating, maintaining, and planning the bus network. This includes route planning to provide coverage across the service area, maintaining the bus fleet, and managing the workforce of bus operators and support staff. The Department is focused on improving reliability, accessibility, and customer experience, while modernizing the bus fleet with an emphasis on sustainability and efficiency.

Ridership for bus services has fluctuated in the last four years, impacted by external and internal factors, including:

- 2019: Prior to the COVID-19 pandemic, MARTA's bus services experienced stable to slightly increasing ridership, in line with public transportation trends in U.S. urban areas.
- 2020: The pandemic significantly impacted ridership due to lockdowns, remote work policies, and public health concerns. MARTA, like many transit systems worldwide, saw a substantial decrease in ridership during this period.
- 2021: As restrictions eased and vaccination rates increased, there was a gradual recovery in ridership, although numbers remained below pre-pandemic levels. During this period, MARTA implemented safety measures and service adjustments to adapt to changing ridership patterns.
- 2022-2024: Recovery continues to incentivize ridership through service improvements and marketing campaigns. However, challenges such as changing work habits (e.g., increased remote work) continue to affect ridership levels.

MARTA is planning several future changes and improvements to its bus services, reflecting broader trends in public transportation such as sustainability, technology integration, and enhanced service delivery. More specifically, MARTA has several plans in place to address performance issues and enhance ridership for its bus services in the coming years. These key initiatives include:

- **MARTA 2040 Bus Network Redesign:** This comprehensive redesign aims to create a more efficient and reliable bus network. The goals include delivering faster service, improving regional connectivity, reducing travel times, and promoting safety. The redesign process involves analyzing existing conditions, developing draft networks, and finalizing the new network after public input and board adoption.
- **Performance improvements:** MARTA is focusing on KPIs to monitor and improve service reliability, on-time performance, and customer satisfaction. This includes addressing issues like staffing shortages and equipment maintenance to help ensure consistent service.
- **Public engagement and collaboration:** MARTA is actively involving stakeholders and the public in the redesign process to help ensure that the new network meets the needs of the community. This collaborative approach helps to identify priorities and leads to informed decisions about service adjustments.
- **Technology upgrades:** MARTA is implementing advanced technologies for real-time tracking, mobile ticketing, and improved communication systems to enhance the passenger experience.

These efforts are part of MARTA’s broader strategy to adapt to changing travel patterns and help ensure that the bus network effectively serves Atlanta area residents and businesses.

Through documentation reviews and interviews with key stakeholders and decision makers, KPMG performed the following tasks related to Bus Operations as part of this Management Audit:

- Determine the existence and effectiveness of policies and procedures to help ensure MARTA’s compliance with the MARTA Act and applicable FTA and GDOT regulations and requirements, and the achievement of MARTA’s organizational objectives.
- Evaluate how the Bus Operations Department monitors its performance and effectiveness.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
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3. Bus Operations
<b>Difficulty hiring bus and rail operators and maintaining headcount</b>
<p><b>Observation #3a:</b> The process of attracting, hiring, and retaining bus and rail operators at MARTA is challenging for a variety of reasons, including:</p> <ul style="list-style-type: none"> <li>• There is a stipulation in the collective bargaining agreement (CBA) requiring rail operators to begin their MARTA careers as bus operators, even if they have previous rail operator experience on other major transit systems. This makes it difficult to hire qualified candidates who would be ready to begin as rail operators with less training/onboarding than former bus operators.</li> <li>• Even with the focus on training and employee retention driven by the Human Resources Department, which includes measures such as sign-on bonuses, quarterly incentive bonuses for attendance, scheduled pay raises, and sponsored training for commercial driver’s license (CDL), MARTA struggles to retain bus operators due to the initial 18-month period during which their schedule and routes are not fixed. Since schedule and routes are based on seniority, new bus operators’ hours often fluctuate between early shifts (begin at 4:00am) and late shifts (end at 2:30am) and change days week-over-week. The lack of work/life balance and a set schedule makes it difficult to retain bus operators.</li> <li>• The highest-performing bus operators often elect to transition into rail operator positions once eligible. This results in continuous recruitment, hiring, training, and retention efforts for new bus operators that is felt across multiple MARTA departments.</li> </ul> <p>Each of these factors introduces complexities that directly affect staffing levels, operational capacity, and the Authority’s ability to best serve their ridership.</p>
<p><b>Recommendation #3a:</b> KPMG recommends that MARTA consider drafting and adopting a policy that mirrors this stipulation in the labor agreement to enable direct hiring into rail operator positions. The Authority should attempt to negotiate this stipulation with the ATU Local 732 and prepare to justify the new policy from the lens of employee satisfaction, safety, and customer service. This will allow the highest-performing bus operators to remain in that position, while permitting additional train service and improved, faster service. KPMG also recommends that MARTA continue the mentorship program for bus operators.</p>
<p><b>MARTA Response:</b> As it relates to the CBA requirement for hiring rail operators, Bus Operations will continue to work with our Labor Relations office to craft language for presentation during the upcoming CBA negotiations. It is clear that the direct hiring of rail operators will decrease pressure on bus operator staffing levels and result in a more efficient means to operate rail service. As to employee retention, recently, and as a test, MARTA Service Scheduling “re-cut” the existing cafeteria style bus schedule approach to a rostering style bus schedule approach. This is the industry standard and used by most transit bus agencies in the US. This approach to scheduling stabilizes the work week for operators lacking enough seniority to choose a work schedule aligned with their personal preferences. Rostering has been proven to result in greater schedule consistency, back-to-back off days, flexibility of eight and ten-hour shifts, and fixed overnight breaks for safety.</p>

It is clear that at a minimum, implementing this approach for our most fragile segment of the bus operator cohort, the 1-18-month employees, will increase retention. Making this change would benefit the Authority tremendously and does require approval and the cooperation of our ATU Local 732. Our plan is to seek approval for the ATU of a pilot rollout of rostering for an upcoming markup and if successful, adopt rostering as our scheduling making approach for bus operators permanently. Regarding the mentorship program, Technical Training is currently implementing a plan to roll this out to the other two bus divisions who currently do not have it. In addition, during January 2024, MARTA Technical Training, in cooperation with our ATU Local 732, implemented a Line Instructor program which in a short time, has returned solid results. We have seen bus operators who continued to struggle post-training get the additional instruction required and now are performing to standard.

### 3. Bus Operations

#### Policy needed to address requests for non-standard use of MARTA buses

**Observation #3b:** The Chief Administrative Officer regularly receives requests from neighboring transit jurisdictions and community organizers to use MARTA buses for purposes beyond standard transit operations (e.g., mobile cooling stations for sporting events and road races, senior citizen group outings). While there is a current policy that prohibits MARTA from providing charter bus services, the MARTA Act does allow the Authority to provide special bus services if the request originates from a jurisdiction and is submitted via a standardized request form. These requests often remove 10-20 buses from service for regular operations, occasionally during busy commute times. Additionally, the requests may encroach on MARTA's daily four hours of down time to clean, maintain, and service buses, trains, and wayside tracks.

**Recommendation #3b:** KPMG recommends that MARTA consider drafting a policy for Board review and approval that will set parameters on qualifying requests and allow the Department leads and staff to focus on the scope of their daily operations. For example, MARTA should define the appropriate number of days/weeks of notice required between request and event; identify the number of riders, buses, and/or trains taken out of service; determine the proximity of the event location to train stations; and assess the impact to the regular schedule and ridership. Events outside of regular business hours may be prioritized, so long as safety is not impacted. Further, MARTA may consider assessing whether jurisdictions should sponsor a portion of the costs of service. The addition of this policy will set defined boundaries and increase customer satisfaction and safety.

**MARTA Response:** Recently Bus Operations was requested to provide input and language to the Department of Customer Experience related to a special bus request policy that was to be presented to the MARTA Board of Directors for adoption. Bus Operations presented thoughts on request and approval timeline, cost recovery methodology and periods of blackout (high peak demand) when special requests could not be considered.

### 3. Bus Operations

#### Bus Operations & Maintenance policies and procedures

**Observation #3c:** Policies and procedures for Bus Operations and Maintenance are in place to promote safe and effective operations of transit service and the maintenance of facilities, vertical transportation, vehicles, and maintenance-of-way. Procedures are reviewed at least every six months, with policies reviewed and updated as needed. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.

**Recommendation #3c:** KPMG recommends that MARTA maintain a dedicated repository for the procedures related to operations and maintenance of bus and rail assets, non-revenue vehicles, and facilities, including vertical transportation. This repository should enable MARTA to quickly access relevant documents and assess the need for review and updates at the defined six-month intervals.

**MARTA Response:** 100% of the SOPs for the Bus Operations were reviewed and completed during a Biennial Audit conducted in July-October 2023. In addition to the Biennial Review, 35 SOPs were selected in April 2024 for a six-month random compliance review to ensure SOPs are reviewed prior to the next Biennial review. The Operations division works closely with DSQA and the Configuration Team during the review process. The DSQA assesses for any possible hazards and has the final approval of the SOPs before they are published for MARTA employees in our repository, emVision360, managed by the Configuration Management team. The Configuration Management team also archives and controls the documents to ensure the latest versions are

used for any update and uploaded into emVision360. Detailed information regarding the SOP management process can be found in OP-SOP-1001.

### 3. Bus Operations

#### Operational performance lagging behind targets

**Observation #3d:** MARTA maintains and publicly reports key performance indicators (KPIs) that align with leading industry standards for public transit organizations. In mid-CY2024, KPIs for bus operations did not meet target performance due to equipment failures such as the timing equipment that monitors the arrival and departure times and compares these times to the bus schedule. Additionally, MARTA buses receive updates to the mobile data terminal (MDT), which will allow operators to better communicate with the Bus Control Center (BCC) and receive information about issues on their routes. MARTA is also undertaking a review of the bus routes and redesigning the bus network to address underperformance on certain routes.

**Recommendation #3d:** KPMG recommends that MARTA consider replacing the faulty timing equipment on buses while also conducting root cause analysis of the issue and addressing it with the manufacturer and vendor of the equipment. If there are flaws with the design and production leading to poor quality of the equipment, MARTA should reconsider future procurement of the equipment. While new and updated MDTs may alleviate communication issues leading to poor performance of bus services on certain routes, KPMG strongly recommends that standardized training on how to operate and use updated equipment is provided to help ensure that the technology is used to its full capabilities.

**MARTA Response:** MARTA is under contract with a vendor and will replace the entire MDT system on MARTA bus fleet, including back-office and on-vehicle equipment. This new system is scheduled to start installation in CY25 and will provide accurate tracking of vehicles and accurate KPI measurements. MARTA is also working on correcting geofencing locations of bus routes and MARTA has corrected numerous bus route schedules that resulted in increased OTP percentages. MARTA's bus leadership team regularly meets with Research and Analysis, Service Scheduling, and Service Planning and are jointly addressing underperforming routes through a combination of schedule changes and larger changes included in the Bus Network Redesign program.

### 3. Bus Operations

#### Bus operator attrition post-CDL

**Observation #3e:** MARTA experiences high attrition rates of bus operators which leads to challenges with maintaining bus service levels. Bus operators often resign after obtaining a Commercial Driver's License (CDL) through MARTA for positions in the delivery and logistics industry that promise higher salaries and more robust benefit packages. Reportedly, competitors recommended that their applicants join MARTA to obtain a CDL and then reapply to their organizations.

**Recommendation #3e:** KPMG recommends that MARTA includes stipulations that are binding new recruits to bus services for a certain amount of time after receiving operator training and CDL through MARTA. This could for example be in the form of a payback requirement if new recruits leave MARTA after an initial period or in the form of a retention bonus, to be paid out after a certain number of months or years within MARTA Bus Services.

**MARTA Response:** MARTA will review the practices of peer agencies to optimize the return on investment for employer funded CDL training, such as implementing a pro-rated fee structure. This approach helps mitigate retention challenges, encourages operators to stay, and reduces turnover.

# 4. Paratransit (Mobility) Operations

## Overview

The MARTA Mobility Services Department operates under the Bus Operations division. It provides Americans with Disabilities Act (ADA) Complementary Paratransit services for individuals who are unable to use the MARTA's other transit services due to disabilities. This service operates within the same areas and hours as MARTA's fixed-route bus and rail services, offering curb-to-curb transportation.

During the past four years, MARTA's Mobility Services focused on improving service reliability and customer satisfaction. KPIs show steady improvement in on-time performance and customer feedback. The department also reduced the average wait times for reservations and enhanced the overall efficiency of the service.

MARTA's expansion plans will also affect paratransit services. The MARTA 2040 Project aims to enhance service capacity, integrate new technologies, and improve accessibility across the network. Specific projects include the development of new MARTA stations and the expansion of transit-oriented developments.

One of the significant upcoming enhancements is the introduction of DriverMate on operator tablets. DriverMate is a software application designed to streamline the workflow for drivers. It offers several functionalities, including GPS integration that utilizes the tablet's GPS to calculate vehicle location and mileage throughout the day; manifest management to provide up-to-date trip manifests, reflecting any changes made by dispatch in real-time; event recording that allows drivers to record events such as pick-ups and no-shows with a single tap; mapping and navigation via integrated mapping functions that help drivers find the best routes, with pick-up and drop-off locations pre-loaded; and communication that reduces radio chatter by enabling direct communication with dispatch through the application.

These features are expected to enhance operational efficiency, reduce errors, and improve the overall service experience for both drivers and passengers.

Through documentation reviews and interviews with key stakeholders and decision makers, KPMG performed the following tasks related to Paratransit (Mobility) Operations as part of this Management Audit:

- Determine the existence and effectiveness of policies and procedures to help ensure MARTA's compliance with the MARTA Act and applicable FTA and GDOT regulations and requirements, and the achievement of MARTA's organizational objectives.
- Evaluate how the Paratransit (Mobility) Department monitors its performance and effectiveness.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
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### 4. Paratransit (Mobility) Operations

<b>Mobility Services performance</b>
<b>Observation #4a:</b> MARTA paratransit ridership increased significantly between 2020 and 2024 while the economy recovers from the global COVID-19 pandemic. As reported by Mobility Services leadership, ridership increased by 10% during the past four years, challenging paratransit services due to the reduced occupancy rules. As a result, KPIs such as On-Time Performance (OTP) have declined, while Missed Trips (passengers waiting for longer than 30 minutes) and Complaints per 1,000 trips increased. Since reduced occupancy was lifted, Mobility Services' ability to meet and exceed these KPIs is improving. MARTA is also procuring vehicles with higher occupancy to alleviate some of the pressures for Mobility Services and continue to improve performance.
<b>Recommendation #4a:</b> To address the challenges posed by increased ridership, KPMG recommends that MARTA continue procuring higher occupancy vehicles to accommodate more passengers and reduce pressure on existing services. Additionally, implementing advanced scheduling and routing software will optimize efficiency and minimize wait times, while regularly reviewing and adjusting routes based on demand will help ensure optimal coverage. Improving communication with passengers is also crucial (e.g., providing timely updates on service changes and delays) as is implementing a feedback system to gather and address passenger concerns promptly.
<b>MARTA Response:</b> In FY24, MARTA implemented 15 lift-equipped minivans into revenue service thereby diversifying the existing fleet and increasing capacity; this, too, aided in better accommodating of single-passenger trips in efforts to maximize larger L-vans usage for multi-passenger and/or shared-ride trips. A procurement is currently underway to add additional minivans and full-sized vans to the fleet in FY25. Lastly, MARTA's fleet replacement plan includes long-term procurement to replace approximately 20% of the existing fleet annually; the associated RFP is being prepared.

<b>4. Paratransit (Mobility) Operations</b>
<b>Ridership increases due to aging population and rising disability rates</b>
<b>Observation #4b:</b> As reported by Mobility Services leadership, the ridership increase was accompanied by an increase in eligibility applications and approvals for Mobility Services. This is reportedly due to an overall aging population and increased disability rates among the population within MARTA's four jurisdictions: City of Atlanta, DeKalb County, Fulton County, and Clayton County.
<b>Recommendation #4b:</b> KPMG recommends that MARTA continue to expand its fleet capacity by procuring higher occupancy and fully accessible vehicles to accommodate the increasing number of passengers with disabilities. This expansion will help alleviate pressure on existing services and ensure that passengers can access reliable transportation. Additionally, enhancing the eligibility and application processes will streamline access to services, making it easier for individuals to apply and receive timely approvals. KPMG recommends that MARTA invest in improving customer support by establishing a dedicated team to assist passengers with disabilities. Offering comprehensive training programs for staff will help ensure high-quality service delivery and address specific needs effectively. Furthermore, engaging with the disability community and collaborating with local organizations and advocacy groups will help MARTA align its services with the unique requirements of passengers with disabilities, fostering a more inclusive transit system. Finally, KPMG recommends that MARTA invest in promoting awareness and education through public campaigns and staff training to raise awareness about the importance of accessibility and inclusivity. These initiatives will help create a more understanding and supportive environment for passengers. By implementing these recommendations, MARTA can better support the rising demand for accessibility and disability services, enhancing overall passenger satisfaction and service efficiency.
<b>MARTA Response:</b> A procurement is currently underway to add additional minivans and full-sized vans to the fleet in FY25. Also, MARTA's fleet replacement plan includes long-term procurement to replace approximately 20% of the existing fleet annually; the associated RFP is being prepared. Regarding eligibility assessments, the scope of work associated for the upcoming solicitation of [eligibility assessments] services will include more stringent training requirements for assessors to guarantee requisite qualifications are met to ensure acumen and propriety for assessments and granting/denying eligibility. Additionally, MARTA implemented an online application platform in 2022 which enhanced the application process. With the upcoming software expected to launch in FY25, additional innovation will be implemented to bolster the application submission and status tracking process, record keeping, customer interface, etc. Lastly, MARTA [Mobility] will maintain and

Strengthen, where needed, partnerships with the disability community (e.g., MARTA Accessibility Committee, Bobby Dodd Institute, Disability Link, Covenant House, Shepherd Center, Atlanta Public and Dekalb County School Systems, etc.) to help align services and promote awareness.

#### 4. Paratransit (Mobility) Operations

##### Mobility fleet past EOL and below “state of good repair”

**Observation #4c:** The paratransit fleet consists of 239 vehicles. MARTA’s capital planning process provides for the replacement of lighter-duty mobility vans on a five-year or 150,000-mile cycle. At present, about 50% of these vehicles exceed the targeted age and mileage, with some reaching 200,000+ miles. This results in frequent vehicle maintenance needs for high-cost items, such as engine replacements and transmission failures and resulting in uneconomical maintenance decisions. Regular “wear-and-tear” and collisions with motorists also contribute to expensive repairs of the paratransit fleet. MARTA’s Mobility Services fleet does not include battery-electric vehicles (EV), or hybrid vehicles. Most MARTA vehicles are fully- or partially funded by contributions from the Federal government, which requires adherence to the Buy America Program’s regulations. At present, no manufacturer of EV paratransit vehicles satisfies these requirements.

**Recommendation #4c:** KPMG recommends that MARTA address the aging Mobility Services fleet. It is crucial to prioritize the replacement of high-mileage vehicles to reduce frequent and costly maintenance needs. MARTA should explore opportunities to incorporate EV or hybrid vehicles into the paratransit fleet, despite current challenges with the Buy America Program’s regulations and the lack of compliant EV paratransit vehicle manufacturers. This transition could be facilitated by engaging with manufacturers to encourage the development of compliant EV options and seeking alternative funding sources to support the procurement of more sustainable vehicles. Furthermore, MARTA should implement a robust maintenance and collision management program to address regular wear-and-tear and collisions with motorists, thereby minimizing expensive repairs and ensuring the fleet remains in optimal condition. This may include additional training for drivers in collaboration with the third-party paratransit providers to better report on vehicle health and prevent collisions. By taking these steps, MARTA can enhance the reliability and efficiency of its Mobility Services fleet, improving service delivery and reducing operational costs.

**MARTA Response:** Post-COVID budget constraints and long lead times for cutaway chassis have led MARTA to reexamine types and sizes of readily available vehicles. MARTA procured 15 minivans in FY23 to determine their viability, which has led to a larger procurement of minivans and full-sized vans in FY25. Furthermore, an RFP for long-term procurements is being prepared to replace approx. 20% of the mobility fleet annually as called for in the MARTA fleet replacement plan. Additionally, the scope of work for the upcoming solicitation for contracted Operations & Maintenance services will include more stringent requirements, based on lessons learned from previous and current contracts, pertinent to vehicle maintenance and reliability management, accident collision preventability, and pre-/post-trip vehicle condition reporting.

#### 4. Paratransit (Mobility) Operations

##### Staffing and open vacancies

**Observation #4d:** As reported by MARTA Mobility leadership, there are open vacancies and a high need for additional staffing. The group maintains 239 vehicles while employing one (1) Maintenance Field Inspector and one (1) Operations Field Inspector. Mobility requested additional resources in the form of one (1) Mobility Operations Specialist to provide analytical oversight on operations and maintenance reports, analyze specific component needs, and provide safety relevant insights to better understand and forecast maintenance needs and assess accident rates. Hiring a Mobility Operations Specialist constitutes a change from the previous practice under the former Mobility Services leadership, which relied heavily on mobility contractors to provide more detailed operational insights.

**Recommendation #4d:** KPMG recommends that MARTA address the staffing shortages within Mobility Services by hiring resources with additional capabilities, such as a Mobility Operations Specialist. Additional capabilities should include analytical oversight of operations and maintenance reports, analyzing specific component needs, and offering safety-relevant insights to better understand and forecast maintenance requirements and assess accident rates. By enhancing in-house skillsets with a Mobility Operations Specialist, MARTA can improve the accuracy and timeliness of operational analyses, leading to more informed decision-

making and enhanced service reliability. Additionally, this approach will enable MARTA to better manage and forecast maintenance needs, reducing downtime and improving the overall performance of the Mobility Services fleet.

**MARTA Response:** MARTA Mobility is currently assessing the possibility of having an existing Support Services administrative position converted to that of Operations Specialist. Permanency of the position will be requested for the upcoming budget year.

# 5. Capital Projects

## Overview

The Division of Capital Programs, Expansion & Innovation (CPEI) is responsible for planning, developing, designing, and delivering capital projects to expand transit services and improve the reliability and safety of MARTA's system through the State of Good Repair program. The division plays a crucial role in meeting the growing needs of MARTA's service area and ensuring the efficient operation of the transit system.

CPEI consists of the Chief Capital Officer, who provides leadership and guidance. Assistant General Managers report to the Chief Capital Officer and oversee various areas such as the Centralized Program Management Office (CPMO), planning and project development, design, engineering and infrastructure, capital programs delivery, and real estate development and asset management. AGM responsibilities within the CPEI is structured as follows:

AGM CPMO: Responsible for effective project delivery and execution as well as monitoring project performance and budget to successful outcomes. CPMO is also responsible for project risk analysis, cost analysis, project scheduling, estimating, capital budget, and invoicing. The group has taken on MARTA's asset management program and is responsible for the asset management policies and procedures and the creation of asset management plans.

- **AGM Planning and Project Development:** Leads the planning efforts for capital projects; developing project scopes, goals, and objectives. They coordinate with stakeholders to obtain project approval and manage the project development process in alignment with MARTA's strategic goals.
- **AGM Design, Engineering, and Infrastructure:** Supervises the design and engineering aspects of projects, including compliance with engineering standards and regulations. They evaluate infrastructure needs and propose appropriate solutions, while also coordinating with external consultants and contractors to achieve project objectives.
- **AGM Capital Programs Delivery:** Oversees the delivery of capital programs; tracking project progress and milestones. They develop and implement project execution strategies for more efficient and timely completion, while also monitoring project budgets and resource allocation to achieve successful outcomes.
- **AGM Real Estate Development and Asset Management:** Responsible for real estate development initiatives and assessing potential development opportunities. They manage property acquisitions and disposals, effectively managing MARTA's assets and maximizing their value. Additionally, they oversee property portfolios and coordinate with external partners in real estate transactions.

CPEI is instrumental in expanding transit services, improving reliability, and enhancing the safety of the MARTA system. Their efforts contribute to the overall growth and development of MARTA's service area.

CPEI uses a suite of software for planning, managing, and monitoring capital projects. Most notably, the division is expanding the use of Oracle Primavera Unifier ("Unifier") as a project management information system (PMIS). In addition to Unifier, CPEI also utilizes other Oracle products such as Primavera P6 for project scheduling and planning, further enhancing their project management capabilities.

MARTA CPEI is continuing the implementation of the Online Invoicing System (OLIS). The CPMO leverages consultants to support the OLIS implementation.

Through documentation review and interviews with key stakeholders and decision makers, KPMG performed the following tasks related to Capital Projects as part of this Management Audit:

- Determine the existence and effectiveness of policies and procedures to help ensure MARTA’s compliance with the MARTA Act and applicable FTA and GDOT regulations and requirements, and the achievement of MARTA’s organizational objectives.
- Evaluate how the Paratransit (Mobility) Department monitors its performance and effectiveness.
- Review relevant policies and procedures for existence and quality.
- Determine if adequate internal controls are in place for the effective and efficient planning, budgeting, and procurement of capital projects.
- Assess how the performance of capital projects is monitored, evaluated, and reported to management and the Board.
- Reviewed relevant policies and procedures for existence and quality and determined if adequate internal controls are in place for the effective and efficient planning, budgeting, and procurement of capital projects.
- Assessed how the performance of capital projects is monitored and evaluated.

CPEI played a major role in the planning of the Five Points Transformation program, including presentation of evaluated scenarios, cost estimation, construction planning, and re-routing of bus services, in collaboration with the Bus Services Department. At the time of this audit, the Five Points Transformation is paused by the City of Atlanta.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
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5. Capital Projects
<b>Retention challenges and gaps in skillsets</b>
<p><b>Observation #5a:</b> MARTA, like many of its peer public transit authorities, is challenged to hire and retain the staffing levels and skillsets necessary to effectively support the capital program. Multiple vacancies within Capital Projects are difficult to fill with appropriately skilled resources (i.e., Design, Engineering, and Infrastructure reported 20+ vacancies). Teams that support hiring, such as Human Resources, are also short-staffed. Although Human Resources and internal recruitment teams regularly host recruitment events at partner organizations and academic institutions (universities and high schools) in addition to online job postings (both on MARTA website and other online job recruitment portals), certain groups within MARTA engage with external recruiting support to identify and recruit resources with the appropriate skill sets and experience. Staff retention among younger employees is a recurring issue, mainly due to higher salaries in external positions. As per internal policy, salary caps must be equal for positions across departments. This has been reported as challenging by CPEI leadership, as the group requires higher levels of experience and additional qualifications. While succession planning and staff development strategies are in place, this was reported as a concern because the younger generation of project managers and planners are needed to backfill the aging and retiring workforce. Further, several Department Leads reported that vacancies within the business units reporting to the Chief Capital Officer (i.e., CPMO, Capital Programs Delivery, Capital Planning) impact the Authority’s ability to efficiently project manage capital projects. These business units rely heavily on external consultants to augment the MARTA workforce. For example, approximately 50% of the 35-person CPMO team are consultants and Capital Programs Delivery relies on external architectural and engineering firms.</p>
<p><b>Recommendation #5a:</b> To address the challenges surrounding hiring and staff retention, KPMG recommends that MARTA consider the following mitigations:</p> <ul style="list-style-type: none"> <li>• Focus on improving and tailoring recruitment strategies to attract a diverse pool of qualified candidates. Actively promote job openings through targeted channels based on talent needs,</li> </ul>

including, digital platforms, university partnerships, job boards, professional networks, and partnerships with educational institutions, as well as hiring external recruitment resources where appropriate.

- Review and benchmark compensation packages and consider offering market-competitive salaries and benefits to attract and retain top talent. Conduct market research to help ensure that compensation aligns with industry standards and adjust compensation packages accordingly. Benchmarking organizations should include transit agencies and engineering consulting firms, construction companies, utilities, and municipalities.
- Revise internal policies that limit the compensation offered to potential candidates for positions with higher qualification and experience requirements.
- Explore non-traditional benefits and flexibility options that appeal to diverse demographics, including younger generations. Regularly review and adjust compensation structures to reflect market changes and employee performance.
- Provide opportunities for professional development, beyond training and certifications. Emphasize career advancement prospects to retain employees, particularly younger staff. Introduce mentorship programs between junior and senior capital projects staff, cross-functional training, and opportunities to work on challenging and meaningful projects.
- Prioritize creating a supportive and inclusive work environment that promotes employee engagement and well-being. Implement initiatives such as employee recognition programs, work-life balance policies, and foster a culture of open communication and teamwork.
- Establish and/or formalize robust learning and development programs tailored to employee career paths, including leadership training for high-potential individuals. Promote a culture of internal mobility, encouraging employees to explore different roles and projects within MARTA. Engage employees in shaping their development plans, linking their goals with organizational objectives.

By implementing these recommendations, MARTA will be better positioned to attract and retain highly skilled employees, creating teams that can effectively handle workload demands. This will contribute to improved efficiency and effectiveness in project execution and overall organizational success.

**MARTA Response:** As noted, MARTA is not unlike other peer agencies, including locally where the region continues to see workforce shortages, particularly in the types of roles required for capital delivery. With large scale programs, both public and private, being delivered in Atlanta, to remain competitive MARTA continues to strive to attract and retain talent, developing and broadening skill sets among team members, and focusing on relocating individuals into the region. CPEI works collaboratively with the department of Human Resources in recruiting strategies and deployment opportunities for professional development. The division is supported by seconded consultant staff, utilizing subject matter experts in key roles to continue to implement best practices for capital delivery and to continue to advance the capital program. With the leadership in the department, the increased support and inclusivity is a continued effort to create a culture of open communication and teamwork. CPEI agrees that this will help to encourage candidates and leaders to see MARTA as a preferred workplace. The recommendations will be implemented to align with the agency's strategic goals and the department's mission to employ a strong, qualified workforce to support the program.

## 5. Capital Projects

### Standardized project management of capital projects

**Observation #5b:** Five departments report to the Chief Capital Officer: CPMO, Capital Programs Delivery, Infrastructure, Planning, and Real Estate Development & Asset Management. The CPMO is responsible for risk analysis, cost analysis, schedule estimation, asset management, budget estimation, invoicing, and the associated reporting of projects spearheaded by other departments and project initiation. A recent MARTA policy subjects each project valued at \$10 million or higher to risk management by the CPMO. The same Chief is responsible for making decisions that impact organizational reporting structure of the CPMO and capital planning business units (i.e., report to the same Chief) as well as prioritization of operations over administrative functions such as project management. This may constrain functions of the CPMO when limited resources (human and technology) are directed to from performing reviews of the capital planning teams. It may negatively impact the Authority's ability to efficiently project manage capital projects.

**Recommendation #5b:** KPMG recommends that MARTA consider further integrating the CPMO's capabilities and strengths into the daily project management of capital projects. This is in line with organizational goals for CPMO support of the full capital portfolio against standardized policies and procedures that are compliant with local, state, and federal funding requirements. A more integrated CPMO will help ensure that the 70+ relevant policies and procedures are adhered to throughout the lifecycle of each capital project. It will also help improve consistent reporting across capital projects.

**MARTA Response:** The CPEI Division was restructured just over two years ago in order to prepare for the more robust needs of the capital program over the next 10 years for both expansion and state of good repair. We continue to refine this structure and optimize the performance of all parts of the division. The CPMO has been instrumental in standing up many of the processes and procedures. As the tools also advance (Oracle Cloud and Unifier) the CPMO strives to provide more consistent reporting across all projects to provide transparent information on a project's health and performance. MARTA has also identified this as well in the overall agency strategic plan.

## 5. Capital Projects

### Remaining gaps in Capital Program policies and procedures

**Observation #5c:** Efforts to improve capital delivery through the completion and/or update of policies and procedures are ongoing, with MARTA making significant progress since the 2020 MARTOC Management Audit. In the past four years, 70+ standard procedures for governance, project data, design, implementation, construction, project controls, safety, asset management, contracts, and procurement were documented. These standard procedures are maintained in a centralized Capital Program Knowledge Center and provide the foundation for consistent management and oversight of capital projects. However there remain policy and procedural gaps that need to be addressed by MARTA. While a capital delivery governance framework exists to guide each capital project's lifecycle, there is a need for the development and implementation of organization-wide policies for risk management, quality, and asset management. Organization-wide policies would provide clear, consistent guidelines and expectations for key aspects of project execution and support more transparent lifecycle planning during each project's initiation and planning phase across the capital program portfolio. Detailed procedures pertaining to project planning, closeout, quality, environmental considerations, third-party agreements and utilities need to be established or finalized. Some procedures are in draft form or pending Unifier implementation updates.

### **Recommendation #5c:**

To address the identified gaps in policies and procedures, KPMG recommends that MARTA consider the following mitigations:

- Develop and implement comprehensive policies where gaps have been identified.
- Establish standard procedures for project planning, closeout, quality assurance, environmental considerations, lessons learned, and management of third-party agreements and utilities aligned with industry leading practices that clearly define the roles and responsibilities of involved parties, consistent with other MARTA standard operating procedures. These procedures should outline the step-by-step processes to be followed and include relevant documentation requirements.
- Regularly review and update the policies and procedures to help ensure their continued relevance and effectiveness. This can be achieved through MARTA's standard two-year review cycle for procedures and periodic feedback from key stakeholders involved in capital program delivery.
- Provide training and guidance to staff members involved in capital project management and delivery to help ensure consistent understanding and application of the updated policies and procedures across the organization.
- Document and formalize procedures for capturing lessons learned from capital project planning and delivery as well as processes for monitoring the implementation of lessons learned.
- Develop procedures for asset transition and activation to improve the introduction of new vehicles into the fleet.

By implementing these recommended actions, MARTA can strengthen its overall capital delivery processes and enhance its ability to effectively manage and deliver its growing portfolio on time, within budget, and to the desired quality standards. This will support consistency and improve capacity building (including the capture of institutional knowledge and transfer) as MARTA continues to grow and develop its services and workforce.

**MARTA Response:** The CPEI team has acknowledged the need for continued development, implementation and regular reviews and updates of the policies and procedures. There are procedures that are in draft due to the growth of the program however are being formalized. The training of staff is ongoing as procedures are created and revised.

## 5. Capital Projects

### Upcoming capital expansion program will impact the entire Authority

**Observation #5d:** The Authority is currently undertaking the largest capital expansion program in the past 45 years to address expected deterioration from decades of use as well as unanticipated environmental challenges (e.g., high temperatures, flooding) throughout MARTA stations, corridors, and other facilities. Stage gates for schedule and reporting compliance with funding provided by the federal government are outlined in the Capital Improvement Program project governance document (located in the Capital Program Knowledge Center Teams site). Due to the \$909.2 million capital programming budget, political interests, and public-facing nature, there are operational and strategic risks that MARTA will need to identify and mitigate.

**Recommendation #5d:** To proactively address operational risks inherent in a project the size of the Capital Improvement Program, KPMG recommends that MARTA consider an “all hands-on deck” approach to the recruitment and retention of the resources needed to effectively support the capital expansion. For example, better integration of the CPMO’s capabilities and strengths into the daily management of capital projects will help ensure that the 70+ relevant policies and procedures are adhered to throughout the lifecycle of each multi-year capital project. To proactively address strategic risks inherent in a political and public-facing program, KPMG recommends that MARTA consider performing periodic post-mortems and debriefs (beyond documenting lessons learned) for completed portions of the capital programs to keep project teams and executive management motivated about continuous improvement.

**MARTA Response:** The recommendation is noted and working towards integrating the CPMO’s strengths and capabilities, by building the CPMO to support the lifecycle of each multi-year capital project. The CPMO is working to mitigate operational risks with an improved CPMO structure. CPEI agrees with the recommendation for more periodic debriefs of capital projects with project teams and executive leadership.

## 5. Capital Projects

### Inconsistent use of Unifier

**Observation #5e:** MARTA implemented Oracle Primavera Unifier / Unifier Accelerator (“Unifier”) as the project management information system (PMIS) for capital projects, serving as a centralized repository for project information and providing a comprehensive solution for project management needs. However, the implementation of this solution has presented the Authority with a few issues. For instance, CPMO can only report on spend to date and not progress, some departments do not have access to Unifier or do not use Unifier consistently, and the reporting tool’s capabilities are limited. To mitigate the lack of reporting tools offered by Unifier, certain reporting tools are being developed, specifically for the Capital Programs, Expansion & Innovation (CPEI) Division. The lack of functionality impacts CPMO by hampering the optimization of project planning and delivery, especially in setting KPIs for the Capital Program, and limits MARTA’s ability to fully leverage project data to inform decision-making and mitigate project performance risks. While Unifier is the primary capital project performance reporting tool for MARTA, there are certain components of project management documentation not available on the Unifier platform. Essential documents such as standard operating procedures (SOPs) and design criteria are located in a separate, centralized Capital Programs Knowledge Center Microsoft SharePoint repository. Currently, CPMO’s reporting is limited to schedule and milestone completion dates. Current FTA requirements for cost allocation and resource allocation metrics are not performed within the tool due to system limitations; rather, the CPMO relies on workarounds to collect and report this information. CPMO is not able to generate system reports on key metrics such as scope creep and scope control measures. Furthermore, the number of Unifier licenses owned by MARTA is fixed at 400 for use by the CPMO, Capital Programs Delivery, Infrastructure, Planning, and Real Estate Development & Asset Management departments as well as external contractors, design teams, operations, safety, security, accounting, and information technology (IT).

**Recommendation #5e:** To address the limitations identified regarding the use of Unifier and access to the Knowledge Center, KPMG recommends that MARTA consider the following mitigations:

- Provide Unifier access to the Planning group (and other groups as appropriate) within MARTA. This will enable the teams to fully leverage the capabilities of Unifier in project planning and delivery, allowing for data-driven decision-making based on a single system of record. Each project stakeholder should be granted access to Unifier and be able to integrate their processes with the workflows.
- Continue with the development of reporting tools within Unifier and expand the requirements of the reports to include the establishment of processes for collecting, analyzing, and reporting data to track KPIs. Integrate relevant project management documentation, including SOPs and design criteria, into the Unifier platform to centralize project documentation, streamline access for project stakeholders, and eliminate the need for separate systems. While key processes and procedures are built into the Unifier implementation, in the interim, CPEI should expand access to the Knowledge Center and provide guidance on the location of information and documents to a wider group of stakeholders.
- Conduct regular, user-specific Unifier training sessions for the Planning group (and others as appropriate), reinforcing the use of Unifier and its features for project planning, performance monitoring, and reporting. This will help ensure that team members are proficient in effectively utilizing the platform to its full potential.
- Regularly review and update the Unifier platform to incorporate necessary enhancements or modifications based on end user feedback. This continuous improvement process will contribute to the platform's effectiveness in supporting MARTA's project management needs.

Implementing these recommendations will support the expansion and reinforcement of consistent usage of Unifier as a valuable tool for data-based decision-making and project performance management and will enhance the overall efficiency and effectiveness of MARTA's capital projects by ensuring that project planning, execution, and reporting are based on accurate, consistent, and easily accessible data and standardized workflows.

**MARTA Response:** Unifier has been the PMIS of record for the past five years and has been fully developed, with continued enhancements this year; including integration of processes for collecting and analyzing data. Training is continuous for all groups on the functionality of the system, including reporting. The efforts are ongoing for the entire CPEI department to work in the system effectively and to provide access to project data and information.

# 6. Information Technology and Security

## Overview

While MARTA's Department of Information Security and Department of Technology are independent entities, they are represented within a single core area for the management audit. Each department plays a critical role in maintaining the organization's technological infrastructure and helps ensure its security posture, encompassing information technology (IT) operations, cybersecurity initiatives, and disaster recovery plans. The collaboration between IT and security teams is essential to address MARTA's operational needs and security requirements.

Key responsibilities and priorities include:

- **Monitoring and visibility:** The departments prioritize enhancing visibility into systems through advanced monitoring tools, such as Flexera and SolarWinds, which are crucial for monitoring and managing the IT environment effectively. These tools allow the Network Operating Center (NOC) to address issues promptly, preventing potential outages or breaches.
- **Infrastructure modernization:** A significant focus is placed on modernizing the IT infrastructure. This includes upgrading aging servers, network components, and other critical systems. The departments are working to improve the network architecture to support new customer touchpoints such as digital signs and ticket vending machines, which rely on robust network infrastructure.
- **Disaster recovery and business continuity:** The departments are heavily invested in refining disaster recovery (DR) plans. Recent efforts include working with Microsoft to develop a comprehensive DR architecture using Azure. Additionally, MARTA is collaborating with other vendors like Rubrik to help ensure data resilience and conduct failover tests. These initiatives are critical in mitigating risks associated with potential IT disasters and ensuring the continuity of essential services.
- **Cybersecurity initiatives:** Cybersecurity is a top priority within MARTA, with the departments actively working to strengthen defenses against increasing threats. This includes the development of a comprehensive incident response plan that involves collaboration with federal agencies like the Department of Homeland Security (DHS) and the Federal Bureau of Investigation (FBI). The departments conduct regular tabletop exercises to test and improve these plans.
- **Collaborative efforts:** The departments operate under a unified umbrella that integrates both IT and security functions. This collaboration is crucial for seamless operations, particularly in areas where IT and security overlap, such as incident response and network monitoring.

While the Department of Information Security and the Department of Technology have made significant progress, there are ongoing challenges related to staffing, procurement, and the integration of new technologies. The departments are addressing these by securing additional resources, streamlining procurement processes, and updating the technology stack to meet the organization's evolving needs.

Overall, this core area is positioned as a critical enabler of MARTA's operations, helping ensure that both the technological infrastructure and security frameworks are robust, resilient, and capable of supporting the organization's strategic objectives.

Through documentation reviews and interviews with key stakeholders and decision makers, KPMG performed the following tasks related to Information Technology and Security as part of this Management Audit:

- Assess the extent of Oracle utilization within MARTA.
- Review policies and procedures related to information security within the IT Department and the Information Security Department for existence and quality.
- Determine if adequate internal controls over information security are in place within the IT Department and the Information Security Department.
- Evaluate how the IT and Information Security Departments monitor and report their performance and effectiveness.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
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6. Information Technology & Security
<b>Comprehensive incident response plan</b>
<p><b>Observation #6a:</b> MARTA has documented incident response plans for cybersecurity breaches that are reviewed annually in addition to tabletop exercises that are conducted more frequently. The incident response process involves communication templates and an escalation protocol starting with the identification of the issue, contacting leadership, and potentially involving external organizations such as the Department of Homeland Security (DHS) and Federal Bureau of Investigation (FBI). MARTA's Chief Information Security Officer (CISO) is responsible for determining whether external agencies are to be involved. Which external agencies are involved is determined by the severity of a particular incident. MARTA is establishing a network operating center (NOC) that will monitor the MARTA network and systems for operational outages and other anomalies 24/7. Leadership is considering combining in the NOC with the security operating center (SOC) for first level triaging, troubleshooting, and escalation of outages and security incidents as the next step towards comprehensive monitoring and incident response set-up.</p>
<p><b>Recommendation #6a:</b> It is our understanding that IT &amp; Security leadership continue to work towards a robust incident response plan. Given the rising frequency of cybersecurity and ransomware attacks on US-based organizations, KPMG recommends that MARTA consider staying well-prepared to defend against these potential cyber threats. The recent CrowdStrike incident also highlights the need for a well-planned incident response plan even for unintentional incidents that cause system and network outages. By implementing these strategies and reviewing them on a quarterly basis or as lessons learned from security incidents, MARTA can develop a comprehensive and effective incident response plan that will enable rapid and coordinated responses to future cyber incidents. Specifically, MARTA should consider the following mitigations:</p> <ul style="list-style-type: none"> <li>• Develop a comprehensive incident response program framework that outlines the scope, objectives, and authority of the incident response program. The framework should also contain the organizational structure of the Incident Response Team (IRT), including decision-making authority and escalation procedure and outline how the incident response program aligns with other security, risk management, and business continuity initiatives across MARTA. (Note: the term "authority" is not tied to specific roles or responsibilities; it is a position designated by the security organization, which can be a security manager, project manager, or technical lead.</li> <li>• Create an incident response playbook that provides detailed procedures for handling different types of incidents. Along with the standard operating procedures (SOPs), the playbook should define criteria for categorizing incidents based on severity, impact, and type; and outline the phases of incident response, including preparation, detection, containment, eradication, recovery, and lessons learned.</li> <li>• Maintain an incident response toolkit that identifies and provides access to necessary tools for incident responders. The toolkit should include a tool inventory of the hardware and software tools used to manage incident responses, tool access and management protocols, and tool training for IRT members on proper usage and capabilities.</li> </ul>

- Establish an incident response communication plan to maintain an updated list of contact information for the IRT, key stakeholders, and external partners. The plan should also include communication roles and responsibilities, communication channels, messaging guidelines, and a crisis communication plan outlining the procedures for managing public relations and media inquiries during major cyber incidents.
- Implement incident response documentation standards that includes protocols for maintaining documentation templates, documentation procedures, the lessons learned repository, and the documentation retention policy.

**MARTA Response:** The Information Security Department is encouraged by our current progress, particularly with annual reviews and regular tabletop exercises. The need for a comprehensive incident response framework is critical to align our cybersecurity efforts with broader risk management and business continuity initiatives. Furthermore, combining the Network Operations Center (NOC) with the Security Operations Center (SOC) would provide an integrated, real-time triaging solution that enhances both operational and security responses. I am confident that our leadership team is moving in the right direction, the rising frequency of ransomware and cyberattacks demonstrates, preparation must be both proactive and responsive. Moving forward, the Information Security Department will continue to focus on developing the comprehensive incident response program framework as outlined, including clear decision-making authority and integration with other key organizational processes. The incident response playbook and communication plan are also priorities, ensuring we have detailed procedures and protocols in place for various types of incidents, as well as robust crisis communication strategies. By also enhancing our toolkit and documentation standards, we will further strengthen our capacity to address security threats with agility and efficiency. These steps are reviewed quarterly and after significant incidents, in order for our department to remain well-prepared for future cyber events.

## 6. Information Technology & Security

### Need for robust IT disaster recovery plans

**Observation #6b:** Disaster recovery (DR) is tested annually. Recent reviews identified areas for improvement, and MARTA is refining these plans with the help of external partners such as the Department of Homeland Security (DHS). Recent tabletop exercises and reviews conducted with DHS revealed gaps in the current DR plan. A continuity of business plan exercise was conducted recently by a third-party, which identified the list of MARTA's business-critical systems and determined how quickly those systems need to recover from a potential disaster. MARTA is currently working with Microsoft (MS) to develop a comprehensive DR architecture using MS Azure, Microsoft's cloud environment. The third-party assessment and Microsoft discovery projects will help MARTA prepare a robust IT DR plan.

**Recommendation #6b:** KPMG recommends that MARTA consider proactively preparing for and responding to IT disruptions to minimize potential impacts on operations. This will help maintain public trust in the organization. MARTA should begin by conducting a thorough risk assessment and business impact analysis (BIA) to identify critical IT systems and evaluate the impact of their failure on operations while assessing risks such as natural disasters, cyberattacks, and hardware failures. Regular data backups to offsite locations or cloud storage are essential, with a focus on secure, encrypted backups tested regularly for integrity and recoverability. Deploying redundant hardware and network systems will help minimize single points of failure; and failover solutions can automatically switch to back-up systems if primary systems fail. Developing a comprehensive DR plan that outlines steps for recovering IT systems and data, along with clear roles, responsibilities, contact lists, and communication plans, is crucial. Regular testing and drills are important to identify gaps and improve response times, with updates to the DR plan based on lessons learned from these tests and actual incidents.

**MARTA Response:** *Risk Assessment and Business Impact Analysis (BIA):*

- Action: MARTA has initiated a comprehensive risk assessment and BIA to identify and prioritize critical IT systems. This process will evaluate the potential impact of system failures on our operations and public trust, considering risks such as natural disasters, cyberattacks, and hardware failures.

- Action: We are enhancing our backup strategy by ensuring regular data backups to offsite locations and secure cloud storage solutions. All backups will be encrypted, and we will implement regular testing for integrity and recoverability to ensure quick and seamless data restoration in the event of an IT disruption.

*Redundant Systems and Failover Solutions:*

•Action: To prevent single points of failure, we are deploying redundant hardware and network systems across key operational areas. Additionally, we are exploring automated failover solutions that will seamlessly switch to backup systems if primary systems fail.

*Comprehensive Disaster Recovery (DR) Plan:*

•Action: MARTA is in the process of developing a detailed DR plan that outlines specific steps for recovering IT systems and data. This plan will clearly define roles, responsibilities, and communication strategies to ensure effective coordination during a disruption. We will maintain an up-to-date contact list and escalation paths for quick decision-making during emergencies.

*Regular Testing, Drills, and Continuous Improvement:*

•Action: Regular disaster recovery testing, including tabletop exercises and live drills, will be conducted to assess our readiness and identify any gaps. These exercises will be followed by reviews, and our DR plan will be updated accordingly to incorporate lessons learned.

The Information Security Department acknowledges the concerns raised regarding disaster recovery (DR) and is fully committed to addressing the identified gaps. We understand the criticality of ensuring that our business-critical systems are resilient in the face of disruptions, particularly as they directly affect the safety and reliability of our operations. The partnership with the Department of Homeland Security and Microsoft's Azure cloud environment is central to our efforts in developing a robust and scalable DR architecture. We are already refining our current DR plans based on the insights gained from recent tabletop exercises, and we appreciate the third-party assessments which have helped us map out recovery timelines for essential systems.

In support of KPMG's recommendations, The Information Security Department will immediately prioritize a comprehensive risk assessment and business impact analysis (BIA) to further evaluate the potential risks and their impacts on operations. We will also implement regular data backups to secure offsite locations and test these backups for recoverability to ensure integrity. Furthermore, redundant hardware, network systems, and automated failover solutions will be deployed to reduce single points of failure. As part of our ongoing efforts, the IT DR plan will be continuously tested and updated with clear roles and responsibilities for staff, ensuring our readiness for any potential disruption. These proactive steps are critical to maintaining public trust and strengthening our operational resilience.

## 6. Information Technology & Security

### Support for cybersecurity initiatives

**Observation #6c:** The MARTA Chief Information Security Officer (CISO) emphasized that recent support from senior leadership enhanced MARTA's cybersecurity posture. Despite progress, he notes the need for additional resources to address increased threats and the current capabilities of the cybersecurity team. The reinstatement of the NOC and SOC indicate that MARTA is prioritizing its investments in security. The Department of Information Security team continues to invest in the latest monitoring tools while making the case for additional human resources to support the cybersecurity initiatives.

**Recommendation #6c:** KPMG recommends that MARTA consider building a compelling case for additional resources by demonstrating the necessity and benefits of enhanced security measures. A key strategy to support additional IT and Security resources involves conducting a risk assessment and gap analysis that helps in developing a detailed remediation plan and highlights the benefits of improved security measures at MARTA. This strategy should include an explanation of how strengthening security can build and maintain public trust and confidence in the agency; provide data on recent security incidents, their impact, and the cost of remediation; and compare MARTA's security posture and spending to industry standards and peer organizations. Case studies and lessons learned from other agencies can be presented to highlight success stories from investing in cybersecurity tools and resources.

**MARTA Response:** The oversight committee's observation highlights the progress MARTA has made in enhancing its cybersecurity posture, additionally, underscores a critical concern that MARTA leadership continues to address which is the continued expansion of the capabilities of our cybersecurity team, despite recent support from leadership, are not fully aligned with the growing threat landscape. While the reinstatement of the NOC and SOC reflects MARTA's prioritization of security. The Information Security Department continues to address the concerns and advance this recommendation, We will continue to

collaborate with relevant departments to gather incident data, evaluate the financial impact of recent security breaches, and benchmark our security posture against peer organizations. In doing so, we will also leverage industry case studies to demonstrate the value of enhanced security resources, emphasizing how these investments can maintain public trust and ensure MARTA's resilience in the face of evolving cyber threats.

## 6. Information Technology & Security

**Observation #6d:** Business continuity plans (BCP) are tested annually as part of the disaster recovery exercise. This exercise is an extension of disaster recovery plans even though BCP can be implemented in several other IT and security incidents, such as the July 2024 CrowdStrike incident that caused several billion dollars in damage around the world. Recent reviews of the BCP at MARTA have identified areas for improvement. For example, the infrastructure that supports MARTA's critical operations such as the integrated operating center (IOC) are not currently spread out. It is our understanding that IT is creating a comprehensive list of MARTA's applications and incorporating them into the BCP by assigning criticality factors to each application. In cases of natural disasters and catastrophic events, physical destruction of data centers can severely cripple business continuity. MARTA is considering shuffling the business-critical systems and moving some of the infrastructure to different geographical locations to avoid single points of failures.

**Recommendation #6d:** To help ensure business continuity, KPMG recommends that MARTA consider developing a comprehensive BCP that covers the operations of each department. This plan should outline procedures for maintaining essential functions during disruptions. Employee training and awareness are also vital. It is crucial to obtain input from each team on the criticality of their application(s) to prioritize the recovery order followed by outages. Regular training sessions on DR and business continuity procedures should be conducted to inform employees of their individual roles and responsibilities during an incident. An incident response team should be formed with members from IT, operations, human resources, and other key departments to coordinate recovery efforts and maintain operations. Remote work capabilities should be enabled by providing secure access to necessary systems and data, as well as ensuring that the infrastructure is robust and scalable to handle increased demand during an incident. Lastly, a public communication plan should be developed to communicate critical updates to ridership and stakeholders during and after an incident. This plan should utilize multiple channels (e.g., websites, social media, and local media) to disseminate information and updates.

**MARTA Response:** We appreciate KPMG's recommendation and are fully committed to developing a robust Business Continuity Plan (BCP) that ensures the continued operation of MARTA's essential functions during disruptions. MARTA is proactively developing a comprehensive Business Continuity Plan (BCP) to ensure essential operations continue during disruptions. This includes gathering input from all departments to prioritize recovery efforts, conducting regular employee training on disaster recovery and continuity procedures, and forming an incident response team with key department representatives. Remote work capabilities will be enhanced by providing secure access to systems and ensuring scalable infrastructure to handle increased demand during incidents. Additionally, a public communication plan will be developed to keep riders and stakeholders informed through multiple channels, ensuring transparency and maintaining public trust during disruptions.

The recent findings from the oversight committee regarding MARTA's Business Continuity Plan (BCP) underscore critical areas for improvement, particularly the need to diversify infrastructure locations to avoid single points of failure. The July 2024 CrowdStrike incident serves as a stark reminder of the potential global impact of such vulnerabilities. While it is encouraging that we are assigning criticality factors to each application and have annual disaster recovery exercises in place, we recognize the importance of extending these practices to address a broader spectrum of IT and security incidents.

In response, we will continue to prioritize the development of a comprehensive BCP that includes input from all departments to ensure the prioritization of critical applications during recovery. The Information Security Department will work closely with IT to redistribute business-critical systems across multiple geographical locations, enhancing resilience against natural and man-made disasters. Additionally, the Information Security Department will implement regular employee training and awareness sessions to clarify roles and responsibilities during incidents, ensuring all personnel are equipped to respond efficiently. A cross-functional

incident response team will also be established to coordinate efforts across key departments. Additionally, we will develop a robust public communication plan leveraging multiple platforms to keep stakeholders informed during crises. These steps will significantly bolster our business continuity capabilities.

## 6. Information Technology & Security

### Need for modernizing current technologies

**Observation #6e:** MARTA's IT infrastructure needs modernization for improved efficiency and enhanced security posture, by increasingly moving the storage infrastructure to be cloud-based. Few systems within MARTA currently leverage cloud storage. Additionally, the closed-circuit television (CCTV) devices need to be upgraded. The current CCTV infrastructure is aging, having been in operation for several years. Consequently, the infrastructure is becoming increasingly unreliable, leading to frequent system failures and instances of missing or inaccessible footage. There are multiple initiatives to modernize MARTA's aging technology infrastructure, including assessing and upgrading power and cooling systems in data centers, migrating workloads to Azure cloud, and upgrading servers to the latest versions with the latest patching. Additionally, MARTA is standardizing their camera hardware, centralizing camera feeds, and exploring ways to automatically stream bus camera footage to cloud storage. They are also implementing a cloud-based data warehouse and procuring a tool (i.e., Flexera) for asset management and versioning recommendations.

**Recommendation #6e:** KPMG recommends that MARTA consider implementing modernized tools and technology, as it is crucial for enhancing operational efficiency, improving customer experience, and ensuring long-term sustainability. MARTA has heavily invested in AFC 2.0, which will go live in the next few months and a few other system upgrades are in the pipeline but much more needs to be done to achieve better industry standards.

- To effectively modernize technology infrastructure, start with a comprehensive inventory assessment to understand existing systems and applications. Identify outdated technologies and areas where modern solutions could enhance efficiency and performance. Next, develop a strategic modernization plan by clearly defining objectives such as improved efficiency or better customer service, and ensure these goals align with the agency's mission. Prioritize initiatives based on their impact, urgency, and available resources.
- Secure funding and resources by creating a detailed budget that includes costs for modern technologies, training, and maintenance. Identify potential funding sources like government grants or public-private partnerships and allocate resources effectively to support the modernization efforts. Focus on key modernization areas such as upgrading infrastructure, adopting cloud solutions, and improving data management and cybersecurity.
- Implement advanced technologies, including internet of things (IoT) devices for real-time monitoring, artificial intelligence (AI) and machine learning for predictive analytics, and mobile applications to enhance customer experience. Foster a culture of innovation by establishing innovation labs, providing employee training, and encouraging cross-departmental collaboration.
- Engage both internal and external stakeholders to gather input and support for the modernization efforts. Develop a change management plan to guide the transition, communicate the benefits, and provide necessary training and support. Monitor progress by defining key performance indicators (KPIs), conducting regular reviews, and fostering continuous improvement. Finally, ensure that modernization efforts are scalable and future-proof, while also considering sustainability and environmental impact in technology choices.

**MARTA Response:** MARTA has already taken significant steps toward modernization; however, we recognize the need to meet industry standards and improve operational efficiency. We will start by conducting a thorough inventory assessment of our existing systems, identifying outdated technologies, and developing a strategic plan focused on enhancing performance and customer service. Our modernization efforts will prioritize upgrading infrastructure, adopting cloud solutions, improving data management, and enhancing cybersecurity. We are also exploring emerging technologies like IoT, AI, and mobile applications to further improve operational efficiency and customer experience. Securing funding and resources will be key to these efforts, and we are actively pursuing grants and partnerships to support our initiatives.

## 6. Information Technology & Security

**Update policies and procedures to address emerging technology risks**

**Observation #6f:** While different components of the Information Security and Technology Departments are continuously subjected to the annual internal audit process, technology remains a high-risk area to MARTA due to external threats. The constant evolution of technology and the associated security threats (e.g., cyberattacks, ransomware, and state-sponsored cyber intrusions), creates an environment where security measures are frequently revised via patches and updates to protect MARTA's systems. Although the Authority is proactive when possible and responds quickly to mitigate security threats, there is sometimes a delay in the document administration updates of the impacted policies, procedures, and standard operating procedures, resulting in gaps between the adopted operational processes and the documentation.

**Recommendation #6f:** KPMG recommends that MARTA consider reviewing and updating IT policies and procedures more often than the annual audit plan. Specifically, the Chief Information Security Officer (CISO) should review their policies and procedures for potentially missing updates, additions, and removals to policies and workflow monthly. To promote flexibility into the annual audit plan and address event-based situations, the CISO should collaborate with the Internal Audit Department and Chief

**MARTA Response:** MARTA acknowledges the observation and recommendation provided by KPMG. While we maintain a strong focus on mitigating evolving cyber threats through the use of various technology along with timely patches and updates, we recognize the need for more frequent reviews of our policies and procedures to ensure alignment with operational practices. To address this, the Information Security Department will implement a bi-annual review cycle, in addition to the annual audit, to ensure that documentation accurately reflects current security measures. We will also strengthen collaboration with the Internal Audit Department to address event-driven updates and minimize any gaps in policy administration.

# 7. Human Resources

## Overview

The Department of Human Resources (HR) is comprised of the Office of the AGM of Human Resources, the Office of Human Resources, the Office of Labor Relations, and the Office of Learning & Development. The purpose of the Authority’s HR Department is to support its employees, mission, and operations. HR’s core mission is to enhance MARTA’s effectiveness through the administration of MARTA’s human resources programs.

Through documentation review and interviews with key stakeholders and decision makers, KPMG performed the following tasks related to Human Resources as part of this Management Audit:

- Review policies and procedures related to employee administration for existence and quality.
- Evaluate the effective use of information technology in the employee administration process.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
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7. Human Resources
<b>Limitations of the current use of the Oracle Cloud Recruiting Module</b>
<p><b>Observation #7a:</b> The Human Resources Department is responsible for recruiting qualified candidates for positions across the Authority. The Oracle Cloud Recruiting Module is not integrated with the other Oracle modules and information technology systems leveraged by other departments and business units. Further, there are several limitations within the module, including the inability to flag/identify previous applicants or key word search resume submissions. This can result in time-consuming, manual tasks and duplication of efforts (e.g., repeated application reviews/interviews for previously disqualified candidates).</p>
<p><b>Recommendation #7a:</b> To accelerate the Human Resources Department’s FY2024 rate of hiring (~500 staff) while maintaining the current team composition and number of full-time equivalents (FTEs), KPMG recommends that MARTA consider developing workaround procedures to supplement limitations of the present version of the Recruiting Module. The current five-year contract with Oracle limits the Authority’s ability to customize and configure to meet each business unit’s unique needs. In future IT procurements, upgrades, and patches, the Authority should consider how the HR Department uses recruiting tools to meet organization-wide goals, such as Title VI and Diversity and Inclusion.</p>
<p><b>MARTA Response:</b> HR has leveraged other tools to increase the applicant pool. We recently upgraded our contract with LinkedIn, renewed the Indeed.com and have been working closely with the IT department to purchase tools and modules within Oracle Cloud that will provide the ability to source through resumes and identify potential candidates more efficiently.</p>

7. Human Resources
<b>Limited involvement in technology decision-making</b>
<p><b>Observation #7b:</b> Although the transition to Oracle Cloud is recognized as a positive advancement for the Authority, the HR Department lost functionality and two decades of customizations in the process. This has impacted the HR Department’s ability to use the system efficiently, resulted in negative end user experiences and increased manual workflows (see #7), while also slowing throughput due to the change management and training initiatives to support the implementation.</p>

Further, the temporary absence (i.e., approximately six months) of a Chief Information Officer (CIO) to spearhead initiatives to address the HR Department's existing challenges contributed to additional delays in implementing necessary technological advancements.

**Recommendation #7b:** KPMG recommends that MARTA consider providing the HR Department with some autonomy in future software procurement decisions by including them in the evaluation teams for vendor/platform technical proposals. Embedding stakeholders responsible for performing their daily operations via these systems in the Information Technology (IT) Department's review and evaluation process will encourage the procurement of tools that work well across MARTA's back office. KPMG also recommends that MARTA consider the user experience external end users (applicants) of the HR systems, as this is often the public's first impression of MARTA's technological capabilities.

**MARTA Response:** The new CIO has created HR/IT partnership meetings to discuss technical challenges experienced not only with Oracle Cloud, but other software that the department relies on daily. We have seen positive changes due to the ongoing communication regarding the needs of the department. Furthermore, HR has been included in demonstrations of new Oracle Cloud modules and discussions around the user experience.

## 7. Human Resources

### Maximizing the potential of Power BI Dashboards

**Observation #7c:** The Human Resources Department leverages Power BI dashboards to track, monitor, and report high-level information related to headcount, salary information, as well as trends with new hires and attrition. They also pull lower-level details on the demographics of active employees to inform decision-making for transit routes that best serve MARTA's workforce during their commutes and ensuring that the location of health care clinics compatible with medical benefits offered by the Authority are in close proximity to neighborhoods heavily populated by employees.

**Recommendation #7c:** KPMG recommends that the Human Resources Department consider exploring the capabilities of the Power BI tool and expanding their use by drilling down into lower-level key performance indicators (KPIs) and employee demographics. For example, reporting on the education level breakdowns of the current workforce to inform recruiting methods and locations may yield an increase in the qualified and diverse applicant pool. MARTA should determine which KPIs and metrics are most meaningful to leadership, so that the HR department can provide clear and consistent information that supports data-driven decisions by the C-Suite in alignment with organizational goals.

**MARTA Response:** All HR managers have been trained to access the Power BI dashboard, and the HR team regularly reviews the data together during HR leadership meetings. However, there is potential for improvement in analyzing the data more deeply and drilling down to develop strategies for addressing HR challenges, particularly in recruitment and retention.

## 7. Human Resources

### Sharing PII with ATU Local 732

**Observation #7d:** 63% of MARTA employees and the majority of neighboring transit jurisdiction employees are represented by the Amalgamated Transit Union (ATU) Local 732. As a result of recent arbitration, the active 2023 collective bargaining agreement negotiated between the Authority and the Union now contains a provision stipulating that any complaints or actions potentially leading to disciplinary measures against a member necessitates formal notification from MARTA to ATU Local 732. This includes matters related to Title VII employment discrimination complaints. Consequently, MARTA is required to disclose personally identifiable information (PII) about the employee who made the complaint (plaintiff) and the subject of the complaint (defendant) to the Union during the case investigation, even if it does not amount to a disciplinary action. This provision creates challenges to protecting the confidentiality of involved parties and poses an information handling risk during the transfer of this information from MARTA systems to ATU Local 732 systems.

**Recommendation #7d:** KPMG recommends that MARTA consider implementing workflow procedures and information handling policies to help guide the data exchange of PII between the Authority and the Union and minimize the risk of exposing employee information. The data governance and data security for this interaction should describe the people, processes, and technologies involved to ensure appropriate access restricted to a

small group of users, privacy, and confidentiality. Additionally, MARTA should continue to maintain positive and productive relations between the Employee & Labor Relations Department and the union to reinforce collaborative problem-solving and dispute resolution.

**MARTA Response:** In an effort to address concerns and challenges raised regarding protecting the confidentiality of parties of Title VII complaints when providing email notifications to MARTA management and ATU Local 732 officials, the following actions will be taken: The Department of Diversity & Inclusion will mark the email notifications as “Strictly Confidential – Do Not Forward”. In addition, Diversity & Inclusion and the Department of Labor and Employee Relations will work with the Department of Technology to consider different technological solutions that are available to track the receipt and opening of the emails.

## 7. Human Resources

### Enforcing policies and procedures at the staff and manager-levels

**Observation #7e:** The Human Resources, Diversity & Inclusion, and Employee & Labor Relations Departments are responsible for investigating certain types of complaints made by and about MARTA employees. They identified challenges in the adherence to procedures below the level of Assistant General Manager (AGM) due to a lack of awareness of the organization’s policies. For example, sexual harassment allegations may not be escalated to the appropriate team for investigation in a timely manner. It is common for the manager of employees to attempt to deconflict the situation without HR’s involvement. Late notification of alleged incidents impedes the investigation team’s ability to meet the Federal Transit Authority’s (FTA) requirement of complaint resolution within 90 days. It also negatively affects the retention of victims of alleged bullying and/or harassment.

**Recommendation #7e:** KPMG recommends that MARTA consider performing a root cause analysis of why Human Resources policy awareness and procedure adherence decreases below the AGM level. In addition to one-time training requirements (often during the onboarding process), MARTA should consider increasing the cadence to annual trainings, supplementing training videos with instructor-led sessions, including accompanying course exams and evaluations, and targeting the audience by level or event. Training compliance should be tracked and documented in improvement plans for frequent offenders.

**MARTA Response:** HR has developed and implemented several training courses over the past 6 months to educate managers on topics such as the procurement process, reviewing dashboards in Power BI, processing employee changes in Oracle, etc. The newest course is called MTOP (Management Transit Orientation Program). The purpose of this program is to ensure newly hired or newly promoted managers are provided the tools necessary to perform in a management position. This course is mandatory and is reported to the AGM or C-level leadership to ensure compliance.

# 8. Finance and Budget Compliance

## Overview

The Department of Finance is comprised of five offices: Finance & Treasury, Budget & Grants, Accounting, Contracts & Procurement, and Revenue Operations. Each office collaborates with the others to perform the financial responsibilities of the Authority including financial planning and analysis; cash and investment management; accounts payable and receivable; revenue collection and processing; capital improvement program management and oversight; Federal and state grants; contracts, procurement, and materials; and operating and capital budgets.

Through documentation reviews and interviews with key stakeholders and decision makers, KPMG performed the following tasks related to Finance and Budget Compliance as part of this Management Audit:

- Reviewed policies and procedures related to budgeting for existence and quality.
- Assessed the efficiency and accuracy of the budgeting process.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
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8. Finance & Budget Compliance
<b>Need to document policies and procedures for bond sales</b>
<p><b>Observation #8a:</b> Recently, MARTA earned triple-A (AAA) bond ratings from the Kroll Bond Rating Agency and Standard &amp; Poor's (S&amp;P) Global Ratings as well as an AA+ rating from Fitch Ratings. These high bond ratings enables the Authority to secure low interest rates and are indicative of strong fiscal management. Per MARTA General Manager and CEO, "an AAA rating underscores the strength of our long-term revenue growth, substantial and growing reserve balances, and shows we are well-positioned to increase our competitiveness for federal funding and meet the expansion commitments made to our jurisdictional partners." Interviews with Department Leads reporting to the Chief Financial Officer indicated that the current documentation for bonds may not cover the Authority's evolving Environmental, Social, and Governance (ESG) sustainability commitments (i.e., green bonds). For example, green bond sales have annual reporting requirements to notify the public of the health of the bonds.</p>
<p><b>Recommendation #8a:</b> KPMG recommends that MARTA consider documenting end-to-end procedures and workflow for bonds, from sale to reporting. These procedures should include a RACI matrix detailing the roles and responsibilities of involved parties, incorporate the reporting and legal review schedule, describe the internal controls, and be reviewed periodically for compliance with elements that are required to be disclosed to the public. The Authority should consider documenting nuances to the RACI that vary based on bond type (e.g., waste and recycling metrics for green bonds). Rather than desktop procedures that are built transaction-by-transaction, these documents should be saved in a centralized repository accessible by the CFO Departments, Legal Departments, and the Sustainability Department. This will reduce the volume of position papers authored by MARTA to justify straying from the policy.</p>

**MARTA Response:** MARTA agrees with the recommendation and will create a Treasury Guide to include a RACI Matrix to walk through the steps from pre-sale of the bonds through disclosure and reporting requirements. The guide will be inclusive of the opportunity to utilize investors in the environmental, social and governance markets. The guide will be completed in the next by January 30, 2025.

## 8. Finance & Budget Compliance

### Reporting gaps caused by disparate finance and budget systems

**Observation #8b:** Each department under the Chief Financial Officer (i.e., Finance & Treasury, Budget & Grants, Accounting, Revenue Operations, and Contracts, Procurement and Materials) uses separate technologies for their daily operations and reporting. This was described by the Department Leads as the primary challenge in leveraging technology to support their objectives. Oracle Treasury is used by the Office of Accounting; Clearwater is used by the Office of Treasury, but there are no direct integrations between the two systems. For example, because Oracle and Hyperion are unable to receive investment information, Clearwater is leveraged for that purpose by the Office of Treasury for reporting to help create bookings for entry by the Office of Accounting into Oracle Treasury. However, there are gaps in how Clearwater interfaces with the Office of Accounting's business processes. The Office of Treasury performs manual processes so that the Office of Accounting can access the data needed for their business processes. Further exacerbating matters, while MARTA is set up as a single regional system, the four jurisdictions require separate reporting (e.g., sales tax). This makes it difficult to report out to the four jurisdictions due to the lack of algorithms within the tool and causes the team to manually back into the numbers for different funding sources. Each finance office is replacing or upgrading their legacy systems within the next three years; some as soon as the next 12-18 months, including updating the current version of Oracle ERP to Oracle Cloud which should alleviate the manual reporting manual efforts.

**Recommendation #8b:** It is KPMG's understanding that there have been incremental improvements in the Contracts, Procurement, and Materials Department to help address findings from the 2020 MARTOC Management Audit. KPMG recommends that MARTA consider how the migration to Oracle Cloud can help address the remaining gaps by involving departments reporting to the Chief Financial Officer as stakeholders in the requirements gathering and design validation sessions. The Authority should also consider application programming interfaces (APIs) to promote data consistency and quality across Oracle Cloud and legacy systems (e.g., Nextfare for AFC). These measures will support MARTA's finance and budgeting goals of a sustainable business model that can abide by their funding sources and a balanced budget every year that directs funding to the right areas. If feasible, MARTA should also consider re-escalating this to the Georgia Department of Revenue for decision on the collection and disbursement of sales tax to the four service jurisdictions (City of Atlanta, Clayton County, DeKalb County, and Fulton County) within the regional system.

**MARTA Response:** MARTA is in the process of converting to Oracle Cloud and the Finance Department has been engaged in the process from the beginning. This transition includes system integrations with several systems through APIs to limit gaps and increase accuracy, consistency, and efficiency. With respect to re-escalating the revenue disbursements of sales tax by Georgia Department of Revenue (GDOR), MARTA will reach out to our counterparts at the GDOR to request a detailed breakdown of the sales tax information by jurisdiction.

## 8. Finance & Budget Compliance

### Automation of the Office of Accounting's processes

**Observation #8c:** The Office of Accounting currently relies heavily on manual processes to complete some of their day-to-day activities. It is our understanding that the upcoming migration from the current ERP systems to Oracle Cloud will help automate these processes. However, in the interim, interviewees stated that the level of effort required to support the Oracle Cloud implementation has been difficult to balance with their department's manually intensive and time-consuming daily operations. While some resources support the implementation project full-time, their work is reallocated to colleagues who struggle to absorb the additional effort while maintaining throughput. The CFO reported that hiring external accountants to augment MARTA's daily finance operations has not been pursued due to the high-level of knowledge transfer involved in onboarding subcontractors.

**Recommendation #8c:** KPMG recommends that MARTA reconsider hiring external subcontractors on a temporary basis to augment the Accounting team both pre- and post-implementation of Oracle Cloud to address resultant growing pains and change management. The Office of Accounting should coordinate with the Human Resources Department in the recruitment and onboarding process. The suggested responsibilities of the external accountants include data entry and first-level tasks, that are reviewed and approved by Accounting team (as appropriate), document administration tasks so that MARTA employees can focus on the activities that require their institutional knowledge. MARTA should also consider contracting a subject matter expert (SME) for Oracle Cloud Finance modules with public transit experience. KPMG further recommends that MARTA make this decision in the near-term and attempt to onboard external accountants as a group so that the onboarding, training, shadowing, and reverse shadowing can be streamlined.

**MARTA Response:** MARTA will highly consider hiring external contractors. MARTA will also highly consider hiring a subject matter expert for Oracle Cloud Finance modules that has public transit experience. Both action items are time sensitive; thus, the decision on both action items will be made within the next 60 days.

## 8. Finance & Budget Compliance

### Need for formalized budget procedures

**Observation #8d:** The Department of Finance is in the process of developing several procedures that have previously not existed, including:

- Compile monthly financial highlights
- Monthly year-to-date (YTD) actual loan in Hyperion
- Create CFO annual budget forecast
- Implementing organizational change requests in Hyperion
- Power BI financial dashboard refresh
- Implementing hierarchy structure changes in Hyperion
- Operating budget transfer
- Annual operating budget multi-year upload
- Perform monthly budget to actuals analysis
- Evaluating position requisition
- Develop the proposed budget books
- OCR process
- Compilation of adopted budget book
- Develop annual operating budget
- Create annual call package
- Troubleshooting invoice/payment issues
- Annual budget load in Oracle
- Process change control/budget changes in Oracle
- Approve project charters in Unifier and Oracle
- Encumbrance reporting in Oracle and Power BI
- Fund availability reporting in Oracle

Some of these procedures are manual processes that bridge the interactions between disparate systems and automated workflow; some are required by MARTA; and others are role-specific processes necessary to perform their duties. KPMG also identified a gap in documented procedures related to the budgeting and accounting controls that can be suspended (i.e., notifications of suspension / reactivation, overrides, workflow, etc.) that have previously resulted in unbalanced line items.

**Recommendation #8d:** KPMG recommends that the Budgets & Grants Department collaborate with the CFO to assign priorities and owners to the list of incomplete procedures described above. The platform (i.e., Hyperion, Oracle, Unifier, desktop) and frequency (e.g., monthly, quarterly, annually) should be considered when determining whether near-term, medium-term, or long-term due dates are appropriate. The aim is to document the missing procedures without negatively impacting departmental performance. Additionally, MARTA should consider integrating their finance and budgeting objectives and key results (OKRs) into these procedures to promote adherence to organizational goals.

**MARTA Response:** MARTA agrees with the recommendation to assign desk procedure development and due dates as recommended. Additionally, several of these will be assigned service level expectations to support the OKR framework.

# 9. Contracts and Procurement

## Overview

The Office of Contracts, Procurement & Materials (CPM) oversees MARTA's central procurement function, managing the purchasing of goods and contracting of services across the Authority. Following the procurement award, CPM is responsible for contract management and inventory. CPM staff are required to follow the MARTA By-Laws, MARTA Act of 2018, local, state, and Federal laws.

It is our understanding that CPM is currently part of the Department of Finance, and the Authority is in the process of shifting CPM to the Legal Department.

CPM and the Legal Department collaborate daily together. Every contract, agreement, and solicitation managed by CPM is reviewed by the Legal Department, with an attorney assigned to each process.

Through documentation review and interviews with key stakeholders and decision makers, KPMG performed the following tasks related to Contracts and Procurement as part of this Management Audit:

- Evaluate the efficiency of the procurement process lifecycle.
- Assess the effectiveness and efficiency of the inventory asset management process.
- Evaluate the effective use of information technology in the contract management cycle.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
<b>9. Contracts &amp; Procurement</b>		
<b>Manual procurement processes</b>		
<p><b>Observation #9a:</b> The Authority leverages a combination of automated and manual processes to execute key procurement functions, resulting in increased frustration by the Contracts, Procurement, and Materials Department unit as well as user agencies. Paper processes contribute to time-consuming competitive and sole-source procurement cycles, are more prone to human error, and are an inefficient use of the procurement resources (e.g., redundancy in duplication of data entry). The procurement procedures meet local, state, and federal requirements and are documented within the Procurement Procedure Manual (available on the public website and SharePoint).</p>		
<p><b>Recommendation #9a:</b> In line with a recommendation from the 2020 MARTOC Management Audit, KPMG recommends that MARTA consider limiting the Authority's reliance on paper and manual workflow in their procurement process. MARTA should consider reviewing the current procurement processes to identify opportunities to automate them and streamline procurements. It is our understanding that the Authority is transitioning to Oracle Cloud in the next 12-18 months. MARTA should consider moving procurement processes to a fully automated system, such as Oracle Cloud, to reduce human errors, human effort, and processing times as well integrate procurement processes with the project management information system (i.e., Unifier) and the capital planning programs. This integration will promote Authority-wide efficiencies and enable more robust reporting.</p>		

**MARTA Response:** MARTA agrees with the recommendation to automate the procurement process where possible, in fact MARTA anticipates having a near fully automated procurement process in place in the next 18-24 months as part of our Oracle Cloud migration. In addition, MARTA adopted an Amended and Restated Procurement Procedure Manual that has resulted in a streamlined manual/process that is still compliant with Local, State and Federal requirements.

## 9. Contracts & Procurement

### Absence of a contract management system

**Observation #9b:** The Authority currently leverages a centralized repository for contracts and associated files rather than a contract management system. As noted in the 2020 MARTOC Management Audit, MARTA does not leverage a fully automated system (i.e., Oracle Cloud) to effectively manage and administer contracts. Rather, the Contracts, Procurement, and Materials Department uses Excel spreadsheets to manually enter system data and monitor spend against each contract. They are also responsible for maintaining the contract files, which include signed original copies, the complete history of transactions, contract payments, an up-to-date project schedule, and safety and quality assurance deliverables related to each contract. The contract files are retained in accordance with the timelines set by the MARTA Records Management Policy and Records Retention Schedule. The lack of a contract management system increases processing time throughout the contract administration lifecycle, adds risk of human error through manual tracking of each line item, impedes the ability to meet service level agreements (SLAs), and reduces visibility and accurate reporting of key contract management data.

**Recommendation #9b:** It is our understanding that as a result of a KPMG finding in the 2020 MARTOC Management finding Contracts, Procurement, and Materials is collaborating with the Information Security and Technology Departments to assess and implement a new contract management system that will automate contract management and administration processes. KPMG recommends that MARTA consider Oracle Cloud contract management functionality and develop processes to effectively leverage and integrate this functionality across the organization (e.g., automated workflow that crosses departments and encompasses legal review and sign-off).

**MARTA Response:** MARTA will continue to work with the appropriate departments to implement a more robust contract management system as part of our Oracle Cloud migration. MARTA anticipates that the automated procurement process along with a more robust contract management system will result in a more efficient procurement process that will assist in the delivery of operating and capital programs.

## 9. Contracts & Procurement

### Need for leadership positions in the Contracts, Procurement, and Materials Department

**Observation #9c:** The Contracts, Procurement, and Materials Department (CPM) is the only MARTA department (within the scope of the 2024 MARTOC Management Audit core areas) that does not have an Assistant General Manager (AGM) or General Manager (GM) position within the departmental organization structure. Rather, the topmost position is at the Director level. The absence of an AGM or DGM role in this business unit poses a risk to MARTA AGM level is less likely to be influenced by management and less likely to ignore recommendations or direction from CPM.

**Recommendation #9c:** With the transition of CPM from under the Chief Financial Officer to under the Chief Legal Counsel, KPMG recommends that MARTA consider adding an Assistant General Manager and/or Deputy General Manager position to the CPM Department to provide more authority in interactions with other departments.

**MARTA Response:** MARTA is not aware of any instances of influence by management over procurement matters. However, MARTA will review the organization structure of CPM and make the necessary changes in a manner that addresses the concerns of the Auditor that provides for continued improvements and leadership of the current office.

# 10. Customer Experience / Service

## Overview

The Department of Customer Experience /& Strategy includes six offices that leverage various tools and technologies to collect and analyze customer feedback, including the Voice of the Customer (VOC) survey, the H.E.A.T system (soon to be replaced by Salesforce), and Sprout Social. The department is also responsible for managing customer interactions through various channels, such as phone, email, social media, and the See/Say application.

The department is currently undergoing several initiatives to improve the customer experience, including:

- Implementing Salesforce as the new CRM system to better manage customer interactions and data.
- Developing a new mobile ticketing application to aggregate three existing applications and provide a more seamless experience for customers.
- Upgrading the automated fare collection (AFC) system to improve real-time information access and system upgrades.
- Improving the first contact resolution rate, customer engagement, and feedback tracking.
- Exploring emerging technologies such as chatbots and AI to improve service delivery and accessibility.

The long-term vision for the Customer Experience & Strategy Department is to be customer-focused and integrate customer experience into each aspect of MARTA's operations. The department aims to use data to make better decisions that will positively impact the customer experience.

Some of the challenges faced by the department include:

- Data integration and utilization: The ability to track the effectiveness and engagement levels of different feedback channels is currently limited.
- Communication and response: The effectiveness of responses to social media engagement outside of business hours is not fully captured.
- Recruiting and retaining top talent: The department encounters challenges in recruiting and retaining skilled analytical staff due to competition from other companies.

Overall, the Customer Experience & Strategy Department at MARTA is committed to improving the customer experience and is actively working on several initiatives to achieve this goal. The department is aware of its challenges and is taking steps to address them.

Through documentation review and interviews with key stakeholders and decision makers, KPMG performed the following tasks related to Customer Experience / Service as part of this Management Audit:

- Review policies and procedures of the Customer Service Department for existence and quality.
- Determine if adequate internal controls are in place within the Customer Service Call Center.

# Observations and recommendations

High Priority	Medium Priority	Low Priority
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## 10. Customer Experience / Service

### Enhancements to customer feedback collection and measurement

**Observation #10a:** The Voice of the Customer (VOC) survey is the Authority’s current instrument for collecting customer feedback and performance ratings. The channel for complaints, suggestions, and praise is for the customer to contact the Customer Service Center, which is external to Research and Analysis (R&A). The H.E.A.T system is also used to collect, track and follow-up customer complaints in the field. Sprout social management tool is used to compile comments from MARTAs social media channels and to publish and schedule posts. Complaints from the social channels are documented and processed into H.E.A.T. MARTA is shifting from solely measuring customer satisfaction (CSAT), which measures overall satisfaction with services, to assessing other metrics such as ease of access, security, and quality of service quarterly.

**Recommendation #10a:** MARTA is doing an excellent job building on its current systems. The upcoming upgrade to the CRM system should make a big difference in tracking and measuring customer feedback. In addition, KPMG recommends that MARTA consider additional key practices for measuring customer feedback:

- Multi-channel feedback collection via surveys that are distributed via email, text, websites, mobile apps, and in-person; social media monitoring that track mentions, comments, and direct messages on platforms like Twitter, Facebook, and Instagram; customer service centers that collect feedback from calls, emails, and chat interactions; and onboard and station feedback that leverages kiosks, QR codes, or physical forms to gather immediate feedback from ridership.
- Feedback management systems such as Customer Relationship Management (CRM) systems that will integrate feedback from various channels to provide a comprehensive view; and specialized feedback tools (i.e., platforms like H.E.A.T and Sprout Social) for tracking and managing social media interactions and other feedback.
- Regular reporting and analysis via key performance indicators (KPIs) such as response times, resolution times, customer satisfaction scores (CSAT), net promoter scores (NPS), and customer effort scores (CES); and trend analysis that will identify common issues and areas for improvement over time.
- Further, KPMG recommends that MARTA consider additional key metrics, including:
- Customer satisfaction scores (CSAT) to measure overall satisfaction with services. Typically collected through post-interaction surveys.
- Net promoter score (NPS) to measure customer loyalty by asking how likely customers are to recommend the service to others. Responses range from 0 to 10, with promoters (9-10), passives (7-8), and detractors (0-6).
- Customer effort scores (CES) measure how easy it was for customers to resolve their issues or get the information they needed. Typically collected through follow-up surveys.
- Response and resolution times to track how quickly customer service responds to and resolves issues. Monitored across various channels, including social media, email, and phone.
- Engagement rates measure the level of interaction and feedback received from different channels and help identify which channels are most effective for customer communication.
- Service quality metrics like on-time performance (OTP) measure the percentage of services operating on schedule and cleanliness /maintenance feedback on the condition of vehicles and stations.

**MARTA Response:**

## 10. Customer Experience / Service

### Customer service tools and technology

**Observation #10b:** There is a focus on using technology to anticipate customer needs before issues arise. The goal is to shift customer relationships from transactional to emotional, integrating services into customers' lifestyles.

**Recommendation #10b:** KPMG recommends that MARTA consider enhancing self-service options and shifting the overall approach to customer service from reactive to proactive. By investing in improved self-service technologies, MARTA will enable their customers to access information and resolve issues independently. MARTA should evaluate these tools for user-friendliness, ease of use, and the ability to integrate them with other support systems to provide seamless assistance.

**MARTA Response:** MARTA agrees with the recommendation and is committed to enhancing self-service options as part of a broader shift from reactive to proactive customer service. Our plan is to launch an innovative technology suite designed to work cohesively, offering customers tools to navigate the MARTA system with ease. The team is developing and accessing customer journeys across various rider segments and is planning execution of several key improvements and upgrades: a redesigned website, an upgraded fare payment system, a unified mobile app, and enhanced digital signage at stations, stops, and across all transportation modes. These initiatives are focused on delivering a frictionless, user-friendly experience, allowing customers to access information and resolve issues independently.

## 10. Customer Experience / Service

### Real-time information access and system upgrades

**Observation #10c:** Real-time information, the Automated Fare Collection (AFC) 2.0 implementation, improving the first contact resolution rate, customer engagement and feedback tracking, the dated CRM system, and ease of access to service were described as current pain points requiring significant improvement.

**Recommendation #10c:** KPMG recommends that MARTA consider improving access by focusing on upgrading applications and systems that provide rider information and real-time updates about services, schedules, and disruptions. Current methods of tracking customer engagement and feedback through social media, the MARTA website, and the call center are inadequate. The feedback received through the website's feedback section is minimal, and tracking engagement needs improvement (i.e., first contact resolution rate) across different channels like social media and the call center. The AFC 2.0 and CRM upgrades are scheduled to go-live in December 2024 and should provide significant relief to the Customer Experience team. Efforts are underway to develop new applications, such as an upgraded "See Something Say Something" application and a replacement for the "MARTA On the Go" application. These will provide better real-time information and assist MARTA customers with better real-time access than the current systems. Customer service representatives need ongoing training to handle emerging issues and new technologies effectively. MARTA needs to develop better training programs to meet these evolving needs in a timely manner. By addressing these pain points, the Authority can expect to enhance the overall customer experience, improve operational efficiency, and better meet the needs and expectations of its riders.

**MARTA Response:** The improved tools will be designed to better aid the customer and the Authority in a more seamless and frictionless travel experience. The customer deployed tools were designed to work synergistically (new website, new fare collection, consolidated app, new communication signs) to deliver a significantly better experience through enhanced and improved self-serve items. Additionally, our backend improvements with a new CRM platform will allow us to gain better customer intelligence and immediate understanding of our customers across all service channels within the Authority. Customer Service will need significant training on the new CRM program among other tools, however, the new CRM platform will be critical for customer intelligence and improved contact resolution rates and training will be deployed throughout the Authority.

## 10. Customer Experience / Service

### Communication and response

**Observation #10d:** While social media engagement is monitored and responded to, the effectiveness of these responses outside of business hours is not fully captured. Low engagement through the website's feedback section and/or inbound calls to the Customer Service Center indicate a potential gap in customer communication preferences.

**Recommendation #10d:** KPMG recommends that MARTA consider broadening data collection and analysis by developing comprehensive key performance indicators (KPIs) that capture engagement across channels, including social media and website feedback. Additional details are listed within 'Recommendation #10a'. MARTA should utilize the collected data from various channels to identify trends, common issues, and areas needing attention to help ensure continuous improvement in service delivery.

**MARTA Response:** MARTA agrees with the recommendation. With the new CRM program, we will be able to better aggregate feedback, identify trends and determine communication preferences and common issues, based on the type of customer engagement. Additionally, in the future, tools such as chatbots in our app and on our website will provide added perception of customer engagement outside of business hours, in addition to capturing key customer intelligence to aid in better responses.

## 10. Customer Experience / Service

### Data integration and utilization

**Observation #10e:** MARTA's ability to track the effectiveness and engagement levels of different feedback channels is currently limited.

**Recommendation #10e:** KPMG recommends that MARTA consider more fully integrating social media interactions and other feedback channels into the main Customer Relationship Management (CRM) system, which is scheduled to go-live in late CY2024. MARTA should continue their efforts to embed customer-centric thinking into each department and business unit so that each team considers the customer impacts of their operations. MARTA should provide training and resources to support this culture shift towards a more unified customer experience approach.

**MARTA Response:** MARTA agrees with the recommendation and is committed to enhancing our ability to track and manage customer feedback more effectively. Our new CRM system, scheduled to go live at the end of CY2025, will provide a robust platform for capturing, categorizing, and analyzing rider interactions across all channels, including social media, customer call-ins, and text messages. This system will allow us to better understand rider patterns and "pain points", and tailor our responses to meet their needs more effectively. By optimizing communication across all feedback channels, we aim to improve the timeliness and relevance of our customer engagement. The CRM integration will be supported by the integration of the customer satisfaction surveys and other feedback mechanisms to track both lead and lag indicators of our performance, allowing us to measure the effectiveness of our actions and continuously improve the customer experience.

# 11. Other Specific Findings

## Overview

The following observations and recommendations do not align to the nine in-scope core areas; they either impact a specific facet of MARTA that crosses multiple areas or correlate to an area not included in scope, such as Safety.

## Observations and recommendations

High Priority	Medium Priority	Low Priority
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11. Other Specific Findings: Safety & Quality Assurance
<b>Advancing MARTA's safety and compliance with Origami Risk system integration</b>
<p><b>Observation #11a:</b> Although the Department of Safety &amp; Quality Assurance (DSQA) utilizes InVision360 for real-time safety monitoring, Power BI for data visualization and analysis, SharePoint for document management and collaboration, and Origami Risk system for data management, the department lacks access to information collected by other departments in disparate systems. While each tool plays a crucial role in data tracking and management, the DSQA needs enhanced data integration and analytics capabilities to develop a clear understanding of safety and compliance data across MARTA. Per the Agency Safety Plan, eight areas (bus operations, rail operations, streetcar operations, paratransit (mobility) operations, rail service control center, risk management, and MARTA Police Department) are responsible for safety metrics and compliance.</p>
<p><b>Recommendation #11a:</b> It is our understanding that the DSQA submitted a request to the MARTA Board of Directors related to the procurement of Origami modules for risk management and historical compliance information. KPMG recommends that MARTA consider integrating its current technological solutions—InVision360, Power BI, and SharePoint—with the Origami modules to create a unified data ecosystem. This integration will enable streamlined data access across departments and enhance DSQA's risk management and compliance tracking capabilities. By leveraging a holistic view of data across these eight areas of operations, MARTA can improve decision-making, optimize resource allocation, and elevate its safety and quality standards. This approach is aligned with leading practices in data management and interdepartmental collaboration, fostering a proactive and comprehensive safety culture.</p>
<p><b>MARTA Response:</b> While DSQA agrees with the recommendation #11A, DSQA could also benefit from exploring technology that collects additional data that capture changing system characteristics and real-time operational performance e.g., vehicle telematics, route design and hazards, operator behavior and rules compliance. EmVision360 houses MARTA's baseline documents (drawings, plans, procedures, and policies, etc.). This platform tracks and maintains all updates and changes to those documents. MARTA has initiated a plan to replace EmVision360 within the next calendar year.</p>

11. Other Specific Findings: MARTA Police Department
<b>Enhancing Technology Procurement and Implementation</b>
<p><b>Observation #11b:</b> MARTA Police Department (MPD) proactively participates in technology conventions and conferences, aiming to identify transformative technologies for the department's processes. Despite this initiative, the procurement and implementation of such technologies are challenging due to the high acquisition costs and the Authority's extensive contracting and procurement cycle. Current policies and procedures require review and approval by multiple departments, including the Information Security, Technology, Contracts &amp; Procurement, as well as approval by the General Manager, and the Board of Directors. Additionally, the rapid</p>

advancement of technologies, such as the use of artificial intelligence in closed-circuit television systems, makes it difficult for MPD to modernize their equipment in a timely manner and stay current with emerging technologies used by “best in class” peer transit systems and law enforcement agencies.

**Recommendation #11b:** To address the MPD’s challenges in the timely procurement of transformative safety technologies, KPMG recommends that MARTA collaborate with the Information Security, Technology, Contracts & Procurement departments to develop a pre-approved vendor list with negotiated terms and rates to streamline the procurement process. Additionally, KPMG recommends that MARTA establish strategic partnerships with technology vendors that provide scalable and flexible solutions. Strategic partnerships can result in more favorable rates and terms (e.g., discounts, flexible payment options, customizable solutions). When selecting new technologies, MARTA should prioritize solutions that are scalable and flexible, allowing for incremental implementation and adaptation to changing needs over time. This approach reduces the risk and cost associated with deploying large-scale systems.

**MARTA Response:** MPD will work with our partners in IT, Contracts and Procurement and Cyber to collaborate and produce best practices to accomplish the purchase and implementation of requested hardware and software in a suitable timeframe. A “checklist” will be implemented for all parties to complete before requisitions are requested to streamline and speed up the overall procurement process.

# Appendix A: Interview List

<b>Interviewee's Name</b>	<b>Title</b>	<b>Meeting Day / Time</b>
Allen, Rhonda	Chief Customer Experience Officer	6/29/2024 12:00 - 1:00pm EST
Andrews, Peter	Chief Legal Counsel	7/1/2024 12:30 - 1:30pm EST
Beasley, Cynthia	Controller at County	7/9/2024 11:00 - 12:00pm EST
Brown, Tim	Interim Assistant General Manager, Capital Program Delivery, Expansion, SOGR and Facilities	6/28/2024 9:00 - 10:00am EST
Davis, Calisha	Acting Director of Mobility	8/2/2024 12:00 - 1:00pm EST
Dawkins, LaShanda	Assistant General Manager of Labor Relations	6/27/2024 4:00 - 5:00pm EST
Dorner, Kesi	Assistant General Manager of Human Resources	7/8/2-24 11:00 - 12:00pm EST
Gibson, Benita	Deputy Chief of Rail Transportation	7/11/2024 1:00 - 2:00pm EST
Goodwin, Robert	Assistant General Manager of Research and Analysis	6/28/2024 1:00 - 2:00pm EST
Greenwood, Collie	General Manager / Chief Executive Officer (CEO)	7/16/2024 1:30 - 2:15pm EST
Hecht, Daniel	Deputy Chief Mechanical Officer	7/17/2024 9:00 - 10:00am EST
Holland, Jacqueline	Director of Contracts, Procurement & Materials	7/5/2024 10:00 - 11:00am EST
Hunt, Jonathan	Deputy Chief of Legal Counsel	7/1/2024 12:30 - 1:30pm EST
Hurley, Kevin	Chief Financial Officer (CFO)	7/2/2024 3:00 - 4:00pm EST
Kreher, Scott	Assistant General Manager / Chief of Police and Emergency Management	6/27/2024 1:00 - 2:00pm EST
Malone Thompson, Michelle	Director of Revenue Operations	7/15/2024 11:00 - 12:00pm EST
McKinney, Ralph	Chief of Safety & Quality Assurance	7/2/2024 2:00 - 3:00pm EST
Morris, Tyson	Chief Information Officer (CIO) / Assistant General Manager of Technology	7/8/2024 3:00 - 4:00pm EST
Mullinax, Melissa	Chief of Staff / Chief Administrative Officer (CAO)	7/5/2024 1:00 - 2:00pm EST
Nash, Paula	Executive Director of Diversity & Inclusion	6/27/2024 10:00 - 11:00am EST
Patterson, Greg	Senior Director of Budgets and Grants	7/9/2024 2:30 - 3:30pm EST
Peart, Shelley	Assistant General Manager of Capital Planning	6/28/2024 9:00 - 10:00am EST

Prescott, Larry	Assistant General Manager of Infrastructure	6/27/2024 9:00 - 9:45am EST
Rocha, Carrie	Chief Capital Officer	7/9/2024 3:00 - 3:45pm EST
Tzanov, Emil	Assistant General Manager of Internal Audit	7/15/2024 2:00 - 3:00pm EST
Washington, LaTeeka	Assistant General Manager of the Centralized Program Management Office (CPMO)	6/29/2024 10:30 - 11:30 EST
Williams, Dwana	Director of Bus Transportation	7/31/2024 9:00 - 9:45am EST
Williams, Lawrence	Chief Information Security Officer (CISO) / Assistant General Manager	7/2/2024 11:00 - 12:00pm EST
Wright, George	Chief Operating Officer (COO)	7/12/2024 9:30 - 10:30am EST

# Appendix B: Validation Session List

<b>Core Area</b>	<b>Interviewee's Name</b>	<b>Internal Audit Attendees</b>	<b>Meeting Day / Time</b>
1. General	Mullinax, Melissa	Tzanov, Emil Alade, Victor	8/5/2024 1:30 - 2:00pm EST
2. Rail Operations	Gibson, Benita	Tzanov, Emil Alade, Victor	8/6/2024 2:30 - 3:00pm EST
3. Bus Operations	Williams, Dwana	Tzanov, Emil Alade, Victor	8/8/2024 9:00 - 9:30am EST
4. Paratransit (Mobility) Operations	Davis, Calisha	Tzanov, Emil Alade, Victor	8/12/2024 11:00 - 11:30am EST
5. Capital Projects	Rocha, Carrie	Tzanov, Emil Alade, Victor	8/8/2024 10:30 - 11:00am EST
6. IT & Security	Morris, Tyson	Tzanov, Emil Alade, Victor	8/6/2024 9:00 - 9:30am EST
7. Human Resources	Dorner, Kesi	Tzanov, Emil Alade, Victor	8/1/2024 Validated via email
8. Finance & Budget Compliance	Hurley, Kevin	Tzanov, Emil Alade, Victor	8/5/2024 1:00 - 1:30pm EST
9. Contracts & Procurement	Holland, Jacqueline	Tzanov, Emil Alade, Victor	8/8/2024 Validated via email
10. Customer Experience / Service	Allen, Rhonda	Tzanov, Emil Alade, Victor	8/5/2024 2:30 - 3:00pm EST
11. Other Specific Findings	Kreher, Michael McKinney, Ralph	Tzanov, Emil Alade, Victor	8/5/2024 Validated via email