KPMG

2020 MARTOC Management Audit

Metropolitan Atlanta Rapid Transit Authority

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Contents

Introduction and Executive Summary

Background and Objectives

The Metropolitan Atlanta Rapid Transit Authority ("MARTA" or "the Authority") engaged KPMG LLP (KPMG) to conduct a management audit for Fiscal Year 2020 (FY20). 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 the Metropolitan Atlanta Rapid Transit Overview Committee (MARTOC). The objective of the FY2020 MARTOC Management Audit was to conduct an assessment of the following key functions across the Authority:

- Rail Operations
- Bus Operations
- Mobility Operations
- Capital Projects
- Information Technology and Information Security

- Human Resources
- Finance
- Procurement
- Customer Service

Scope and Methodology

KPMG and MARTA agreed to a specific scope to focus tasks across each of the desired functional areas. Activities KPMG performed across each functional area include:

Functional Areas	Tasks
Rail Operations Rail Car Maintenance, Maintenance of Way, Vertical Transportation, Facilities Management	— 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.

Functional Areas	Tasks
Bus Operations Bus Maintenance	— 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.
Mobility Operations Operational Performance	— 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 Mobility Department monitors its performance and effectiveness.
Capital Projects Planning and Budgeting, Funding and Financing, Capital Procurement	— Review relevant policies and procedures for existence and quality and 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 and evaluated.
Information Technology and Information Security Oracle Utilization, Information Security Policy & Procedures	— 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 and 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 their performance and effectiveness.
Human Resources Employee Administration	— Review policies and procedures related to employee administration for existence and quality. — Evaluate the effective use of information technology in the employee administration process.
Finance Payroll	— Review policies and procedures related to employee payroll for existence and quality. — Assess the efficiency and accuracy of the payroll process.
Procurement Lifecycle, Inventory	— Evaluate the efficiency of the procurement process lifecycle. — Assess the effectiveness and efficiency of the inventory asset management process.
Customer Service Customer Care Center, Public Safety	— Review policies and procedures of the Customer Service Department for existence and quality and determine if adequate internal controls are in place within the Customer Service Call Center.

KPMG's approach consisted of three phases and was based on our public sector experience and KPMG's reputation for providing quality service. To this foundation, we added effective project planning, critical information gathering and thoughtful analysis, necessary validation and valuable reporting skills.

Phase 1 – Project Planning and Kickoff

During Phase 1, KPMG met with key project stakeholders to reaffirm project goals, milestones and objectives. The meeting included discussions about data needs, interview list, project schedule, and roles and responsibilities of the KPMG team and MARTA staff. KPMG confirmed that planned tasks were "sized" in a manner that could be completed within the requested time frame and allowed KPMG to meet overall project objectives, including identification of key in-scope processes/procedures for review within each in-scope area.

Phase 2 – Information Gathering and Analysis

During Phase 2, KPMG focused on reviewing existing information and interviewing MARTA personnel to understand the strengths and opportunities within the in-scope functions and process areas. We gathered an understanding of current process objectives and applicable governance and compared to current operations. This activity helped us to identify and highlight areas of risk and non-value-added activities. Processes were understood conceptually and followed in operation to identify possible control gaps and weaknesses. Our analysis aimed to determine the economy, efficiency, effectiveness, and potential related risks of the current related processes.

While assessing the business processes, KPMG focused on the following process elements and objectives:

— Efficiency;

— Effectiveness;

— Duplication of efforts;

— Compliance;

— Controls Weaknesses and Gaps; and

— Inputs and Outputs.

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

— **Requested and Reviewed Existing Documentation** – This information was reviewed by our project team and used in subsequent analyses, as appropriate. This involved collecting primarily the following data:

- o Current and historical versions of the MARTA Act;

- o Relevant governing regulations, policies, and procedures;

- o Policy and procedure manuals and other similar documentation;

- o Planning and budget documents;

- o Current and previous Comprehensive Annual Financial Reports;

- o Organization unit and program descriptions;

- o Staff information;

- o Management and financial reports;

- o Operating and performance data;

- o Capital, maintenance and repair data;

- o Copies of prior management audits, performance reviews, and studies, including Federal and Georgia Department of Transportation documents;

- o Inventory of information systems hardware and software;

- o MARTA International Organization for Standardization (ISO) Certifications, including ISO 55001 (asset management);

- o 23 CFR Part 515 Transit Asset Management (TAM) Plans and associated TAM performance measures and targets (e.g., useful life benchmarks for rolling stock and equipment, condition ratings for facilities, speed restrictions on track, etc.);

- o Applicable National Transit Database (NTD) benchmarks for MARTA and identified peer and aspirational agencies; and

- o Current workflow process diagrams.

— **Conduct Interviews** – KPMG conducted interviews with key MARTA management and various other MARTA staff. During Phase 1, KPMG developed an interview request list to establish an appropriately sized list of interview subjects across the in-scope functional areas. Interview results were evaluated to identify potential issues, as well as to help focus subsequent fact finding and analysis efforts by the project team.

— **Perform Observations** – To further substantiate what we learn from our information analysis and interviews, KPMG observed documentation of certain aspects of various processes. We aimed to learn and verify how processes and functions actually are occurring – not just how they are supposed to occur. Observations were conducted remotely due to the COVID-19 pandemic. KPMG reviewed in-scope policies, procedures, and processes against leading practice and for completeness, weaknesses, gaps in efficiency and controls.

— **Develop Findings and Recommendations** – As a result of the data gathering and assessment task, findings, observations, and recommendations were developed. Where appropriate, we developed meaningful, actionable recommendations connected with our findings/observations for MARTA consideration. We focused on the following objectives:

- o Improve Performance

- o Contain Costs

- o Improve Efficiency of Revenues

- o Reduce Risks

- o Facilitate Decision Making

- o Contribute to Public Accountability

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 developed are designed to enhance operations, performance, and mitigate current and future risks. KPMG presented the draft report to MARTA leadership. MARTA responded with formal complete written feedback, which KPMG considered prior to the issuance of the final report.

MARTA fully cooperated with the audit and allowed access to all its books, records, and documents to the extent that KPMG deemed necessary.

Executive Summary

The following table provides a succinct summary of the observations and recommendations contained in the full report. KPMG has provided priorities for each recommendation based on assessing a number of factors, including degree of impact, return on investment, and the risk/opportunity presented by the observation, and timeframe required to implement the recommendation.

High Priority Recommendations

Observation 1.A: Insufficient Enterprise-Wide Policy and Procedure Review and Approval Processes
Observation: MARTA lacks a structured and effective method to update and approve policies and procedures in a timely manner and review on a regular basis. This increases the risk that as processes and/or regulations change, policies and procedures are not reviewed, updated and approved to reflect those changes. As a result, employees may not have access to or knowledge of updated processes, posing the risk that employees will not perform required functions properly.
Recommendation: MARTA should develop a structured process to review and update policies and procedures, including a defined approval matrix and a timely cadence (i.e. annually). In addition, MARTA should hold individuals accountable for not updating or approving procedures in accordance with the developed policy.
MARTA Response: MARTA has in the past maintained a centralized approach to circulating, reviewing and approving policies and procedures. In addition, the organization has successfully advanced the development of Safety and Security policies and procedures as well as the development of the newly-revised Employee Handbook, which we are getting ready to be released. We are continuously evolving and improving our processes and intend to further streamline our approach to the review and approval process. Currently we are assessing the opportunity to re-establish this centralized function in the Chief of Administration Department.
Observation 1.B: Opportunity for Performance Management Strategy
Observation: MARTA leverages various tools for its enterprise data management platform. The Oracle ERP is bundled with Oracle Business Intelligent Enterprise Edition (OBIEE), which is a powerful data management and analytics tool. However, MARTA utilizes OBIEE in a limited capacity. Microsoft PowerBI appears to be MARTA's preferred data management platform – which is used for KPI reporting and various report generation. Inconsistent utilization and lack of integration across critical data sources limits the effectiveness and value of the information presented in reports and dashboards.
Recommendation: MARTA should perform an assessment of the feasibility and potential benefits of a single fully integrated data management and analytics platform to avoid wasteful duplication of effort in two systems and allow access to reporting information from critical systems in a single source. MARTA should develop a formal data management strategy based on the outputs of the assessment.

MARTA Response: In 2019, MARTA strategically identified the need to make better data-driven decisions to improve service and increase operational efficiency, and the Office of Research and Analysis was tasked by senior management to build on MARTA's existing performance management strategy to increase transparency, ownership, and accountability for performance throughout the Authority. The Office of Research and Analysis has acted to develop a clear, consistent, data-driven methodology for setting KPI targets; initiated discussions with KPI owners to revise and streamline MARTA's current strategic KPIs and make them more customer focused; and is co-leading a multi-disciplinary team (the Dashboard Development, Deployment, and Utilization Team) to work with each department to: (1) Define KPIs and set targets that align with and support the Authority's strategic goals; (2) automate, to the extent possible, the data sources, systems, and business processes for KPI tracking; (3) develop and deploy dashboards for KPI reporting; and (4) promote a culture of utilizing dashboards as an integral part of the decision-making process.

Observation 1.C: Lack of Data Integration Strategy

Observation: MARTA's current data processing and management efforts are fragmented. The IT team has developed useful dashboards and KPI reporting tools for various departments. However, these efforts are siloed and tailored for the individual departments and their functional needs.

Recommendation: MARTA should formulate an enterprise-wide data integration, management and processing strategy to integrate data from multiple disparate systems. This Enterprise Data Warehousing (EDW) solution can provide MARTA with better insight into their integrated data as well as better analytics.

MARTA Response: MARTA has initiated a concerted and disciplined effort driven by the Research and Analysis Department to re-establish its Key Performance Indicators (KPIs) with a standardized methodology and consistent approach across the organization. To support this effort, the IT Department established an Enterprise Data Warehousing and Management team in 2019 with a focus on integrating Oracle and other systems of record to provide better insights and access to information regardless of the source application. This team has put in place and is consistently supporting Power BI and the OBIEE Oracle tools as primary data management tools. There are other standard tools that are actively being utilized to clean and produce data. In addition, MARTA purchased and implemented in 1999 Emvison360 as a centralized document management tool which largely houses all electronic documents (program plans, emergency management plans, blue prints and drawings, policies and procedures, etc.) for the organization as a whole. All of these tools combined are currently meeting our organizational needs. MARTA has not identified a critical or pressing need to adopt an Enterprise Data Management Warehouse platform. That said, we have IT teams entirely dedicated to support the data management functions and needs, and we have the corresponding Research and Analysis teams dedicated to the KPIs efforts which are successfully advancing. As these efforts mature, and we continue to expand our analytics capabilities we might consider a more robust or different approach to data integration, but at the moment this integration is being achieved through alternative means.

Observation 5.A: Lack of Consistent Capital Program Procedures

Observation: A 2017 internal review identified gaps in capital program management structures and processes, including a lack of documented SOPs to support effective and consistent project/program management across the Authority. Capital program SOPs have not yet been developed. MARTA is in progress on an initiative to deploy procedures for a centralized program management office by the end of Calendar Year 2020.

Recommendation: MARTA should continue to prioritize the development, approval, and deployment of procedures to support effective and consistent planning, budgeting, monitoring, and procurement of capital projects.

MARTA Response: Agree. MARTA has made significant strides in establishing a defined process for putting; in place centralized, uniformed, cross-functional and accessible procedures. It started with the development of a Governance process which defines approval authority and other defined requirements for project managers. Using the Governance document as a baseline, procedures are being written and staffed for use by project managers regardless of what department they reside in. These procedures will affect project management, construction management, budgeting, cost control, schedule management, and support function interface with Safety and Quality, Grants, and Procurement. Our milestone goal remains the end of Calendar Year 2020 to get procedures in place with robust training beginning in January 2021.

Observation 5.B: Lack of Capital Project Reporting Integration

Observation: Capital project data management has historically been decentralized and compiled by project portfolio managers across the Authority. Critical cost, schedule, and milestone data is manually tracked and reported for compilation by the Department of Capital Programs, Expansion, and Innovation. MARTA is in the process of rolling out Oracle Unifier functionality which will help integrate this critical data.

Recommendation: MARTA should continue to prioritize the Unifier implementation and develop robust processes and training materials to help enable consistent capital program data integration for monitoring and reporting.

MARTA Response: Agree. MARTA has embarked on an aggressive program through the use of Oracle Unifier to define and manage all elements of project delivery and cost management. Phase 1 of the Oracle Unifier implementation is complete. Phase 1 included replacing SharePoint for Project Charters and Project Charter Requests with supporting workflows and replacing Microsoft Access for Capital Reports. Cost modules are active in Unifier all of the Oracle Financials (e-business suite) data already populated in the system. Phase 2 will include Project delivery modules specific to program and construction management and supporting workflows as part of procedures development. As these workflows are completed, MARTA will integrate them into Unifier. A fully integrated and functional data management system will allow MARTA to generate reports, track key performance indicators, develop and track budgets, and train project managers on procedures and data management. A subset of rolling out Unifier is to have a procedures manual as well as training manuals. Our milestone goal is March 2021 to be fully integrated and functional.

Observation 6.A: Oracle Process Improvement Opportunity

Observation: MARTA is working with Oracle to upgrade the software to version 19g, which is scheduled to finish by January 2021. This upgrade provides an opportunity for MARTA to perform a comprehensive review of the processes and explore opportunities to automate many manual processes. The IT team has been working with various functional groups to review and update processes, workflows and functionality of Oracle systems to fix known issues and improve system effectiveness.

Recommendation: As MARTA completes its planned Oracle upgrade, MARTA should undertake a comprehensive exercise to review, update and document business processes associated with the upgraded Oracle ERP for all MARTA user departments and business units. This comprehensive review should emphasize identifying, designing and implementing process enhancements/automation and system configurations to process efficiency and promoting greater enterprise-wide adoption of available Oracle technology.

MARTA Response: MARTA has recently undertaken two efforts to help address this opportunity; The creation of a business process review task force (as part of a larger effort to optimize our annual budget) and a Business Relationship Manager role to assist departments with better utilizing MARTA's technology portfolio of solutions.

In the past 2 years, MARTA recognized the lack of business process engineering skills in the agency to assist in business adaptation to Oracle and other system implementations. Consequently, in FY2020, the Technology department created a new role (Business Relationship Manager) within the office of Innovation and Research to work with departments to understand their business processes, match the resulting automation needs with the agency's technology portfolio, and to assist the departments with adapting their business processes to take full advantage of the available solutions.

Our department hired our first two Business Process Managers and they began work in October of 2020. MARTA will utilize these positions (in coordination with the business process review task force) to help streamline how each department works with our technology and to continually identify opportunities for improvement.

Observation 6.B: Oracle Integration with other Enterprise Systems

Observation: Oracle provides a robust set of Application Programming Interfaces (APIs) for most common integration needs. MARTA has invested significantly into various standalone systems that provide better functional values for MARTA specific needs, such as Hyperion for budgeting, Saba for training management, Clearwater for Investment Accounting and others.

While MARTA has largely integrated Oracle with many systems for various functionality, some enterprise systems such as Clearwater, Unifier, OLIS, Hyperion, P6 are not fully integrated with Oracle. This lack of integration contributes to cumbersome manual processes that are more at risk for errors.

Recommendation: As part of the comprehensive review recommended above, MARTA should review the integration need for Oracle ERP with various in-house enterprise systems. Some of the existing integration processes are rudimentary (data dump, FTP, Excel etc.), which needs to be automated with the use of APIs.

MARTA Response: As a by-product of the North Highland HR assessment, several system integrations were recommended by the team and the Application Support group within the Technology department is beginning the process to sequence and resource plan for those efforts (in time for the FY2022 budget planning cycle).

In addition, the newly staffed Business Relationship Managers will be working with each business unit over the next 6 months to prioritize and sequence needed integrations for inclusion in the FY2022 budget planning cycle. These 2 processes will yield a plan and the resources to integrate those parts of the technology portfolio the merit automation.

Observation 9.A: Manual Procurement and Contract Management Processes

Observation: MARTA uses a combination of automated and manual processes to execute key procurement and contract management processes. These processes contribute to extended procurement lifecycle times and may not represent an efficient deployment of procurement resources.

Recommendation: MARTA should conduct an in-depth analysis into its procurement and contract management processes to identify and implement opportunities to streamline and automate these processes. Emphasis should be given to opportunities to optimize MARTA's utilization of existing, enhanced, or new Oracle solutions.

MARTA Response: CPM is currently in discussion with Information Technology to evaluate and deploy a contract management system as well as developing processes for the functionality of a new contract management system.

Observation 9.B: Lack of Oracle Contract Management Functionality

Observation: MARTA does not leverage Oracle functionality to effectively manage contracts. CPM uses "shadow" Excel spreadsheets to manually enter spend data from Oracle and track contract balance information, increasing process time throughout the procurement and contract administration lifecycles, increasing the risk of errors through manual tracking, and reducing visibility into critical procurement and contract management data.

Recommendation: MARTA should evaluate deploying Oracle contract management functionality and developing processes to effectively leverage this functionality.

MARTA Response: CPM is currently in discussion with Information Technology to evaluate and deploy a contract management system as well as developing processes for the functionality of a new contract management system.

Medium Priority Recommendations

Observation 2.B: Rail Operations KPIs in Alignment with Industry Standards

Observation: Rail Operations maintains and publicly reports KPIs that align with industry standards for public transit organizations. Additional internal performance monitoring practices and metrics are in place throughout the Division of Rail Operations to provide actionable information to management and promote performance accountability.

Recommendation: While Rail Operations maintains industry standard performance metrics, and demonstrates adherence to or exceedance of metric targets, MARTA should consider additional, the inclusion of more customer-centric metrics into formal KPI reporting. This is an emerging trend among leading North American transit and rail agencies. Example metrics for consideration include customer journey time performance, additional platform time, and additional train time. The traditional methodology, and American Public Transportation Association (APTA) standard, for measuring OTP is from terminal to terminal (i.e., start to end of a line). This OTP metric has specific shortcomings, particularly since many customers are not riding lines from terminal to terminal and many also transfer. Generally, customers perceive service delays in terms of additional wait time on the platform or on a train, not based on terminal to terminal OTP.

MARTA should also benchmark against peers to regularly calibrate its target metrics.

MARTA Response: MARTA agrees with clarification. The outward Customer Facing KPI that is referenced, OTP, is a lagging indicator of terminal point to terminal point overall schedule adherence. This is a common and accepted KPI within the industry and MARTA agrees it has limited utility to the Customer. Additional wait time on the platform and on trains are also lagging indicators that report outcomes. MARTA has and will continue to focus on leading indicators or drivers of performance in addition to the more common lagging indicators. This includes operator and fleet availability, fleet reliability, right of way system performance (track circuit, signals, switch performance, power and track conditions), audio and visual information system (AVIS) and elevator reliability and elevator down time. MARTA has also realigned their Rail & Station Management resources to be more focused on the Customer with more direct leadership over rail lines on the system managing the service. MARTA is leveraging their resources in both the Rail Service Control Center (RSCC) and Maintenance Control Center (MCC) to track, trend and assess service calls, service delays and preventable incidents to reduce and/or limit service impacts. This also includes patron behavior that impacts performance. On a case by case basis these indicators will be considered for external consumption.

Observation 2.C: Potential PowerBI Dashboard Enhancements for Rail Operations

Observation: While Rail Operations leverages PowerBI to generate dashboards to provide insights into system performance, existing dashboards largely align directly with MARTA's formal KPIs. MARTA may benefit from enhancements to its dashboard reporting to provide insights into more strategic and tactical data elements.

Recommendation: MARTA should develop enterprise reporting capabilities that provide real-time dashboard and standardized reports and queries. Administrative restrictions and user roles can allow for more advanced users to develop custom reports and queries. For example, existing executive-level reports consist of valuable information that appears to be provided via email. Improvements to dashboarding and reporting capabilities could include a real-time, dynamic PowerBI dashboard that allows users to drill down and filter by areas such as service interruption root causes, delay minutes, line, station, etc.

MARTA Response: MARTA agrees with clarification. MARTA as an agency has invested in Power BI Dashboarding as an effective means to share and consume large amounts of meaningful data. With each passing month new performance reports are being shared at the MARTA enterprise level, at the C-Team level and at the department level within Rail. In addition to On-Time Performance, Ridership, Overtime, Budget Adherence, Customer Performance and State Safety Oversight Reportable Incidents, Rail will look to expand their departmental portfolio of Power BI Dashboard elements to include those discussed in MARTA response to 2.B.

Observation 3.A: Existence of Bus Operations Policies and Procedures

Observation: Bus Operations policies and procedures are in place to promote safe and effective operations of bus service and fleet maintenance. While these policies and procedures exist, some SOPs are dated and may not reflect current MARTA practices, requirements, and strategic priorities.

Recommendation: MARTA should prioritize reviewing Bus Operations SOPs, updating and formally approving where appropriate, and developing a process for periodic review of procedures.

MARTA Response: We concur, solution is in progress. Earlier this year, MARTA identified opportunities for program improvement, and a defined need for procedural discipline. We prepared the job description for a new position, Superintendent – Analysis and Procedures, which is currently moving through early stages of the recruitment process. This will provide priority attention for Operational SOPs, including a structured approach to procedural development, review, updates and approvals. The process will involve designed inputs from/and natural exports to; Training, operational bulletins, incident response and management oversight.

Observation 3.B: Bus Operations KPIs in Alignment with Industry Standards

Observation: Bus Operations maintains and publicly reports KPIs that align with industry standards for public transit organizations. Additional internal performance monitoring practices and metrics are in place throughout the Division of Bus Operations to provide actionable information to management and promote performance accountability. Many of the executive-level reports are provided via email with embedded images, text, and tables

Recommendation: MARTA should continue to collect and track KPIs and should benchmark against peers and to regularly calibrate its target metrics.

MARTA Response: We concur, encouragement acknowledged. MARTA will continue to collect and track KPI. We do occasionally benchmark against peers to reconcile targets and evaluate progress. MARTA will further engage our Statistical resources to continue this practice and seek continuous process and performance improvements.

Observation 3.C: Potential PowerBI Dashboard Enhancements for Bus Operations

Observation: While Bus Operations leverages PowerBI to generate dashboards to provide insights into system performance, existing dashboards largely align directly with MARTA's formal KPIs. MARTA may benefit from enhancements to its dashboard reporting to provide insights into more strategic and tactical data elements.

Recommendation: MARTA should develop enterprise reporting capabilities that provide real-time dashboard and standardized reports and queries. Administrative restrictions and user roles can allow for more advanced users to develop custom reports and queries. For example, existing executive-level reports consist of valuable information that appears to be provided via email. Improvements to dashboarding and reporting capabilities could include a real-time, dynamic PowerBI dashboard that allows users to drill down and filter by areas such as bus road call root causes, vehicle type, route, location, etc.

MARTA Response: We concur, shared interest in full potential of Power BI. Bus Operations will endorse efforts to leverage existing benefits of Power BI in supporting further dashboard and report level information useful in the daily and strategic leadership of the department.

Observation 6.C: Oracle User Training

Observation: IT partners with MARTA HR's Learning and Development (L&D) department to develop and deliver Oracle training courses. IT drives Oracle training content development, while L&D delivers the training through its established platforms. Feedback for the Oracle training delivery is largely positive and seems to have improved over the past few years.

Recommendation: MARTA should formalize the Oracle functional and technical training programs and continually update the program to help ensure that latest functionality, technologies and user needs are reflected.

MARTA's planned upgrade to Oracle 19g is a major upgrade that will require extensive training for MARTA technical and functional users of Oracle system.

MARTA Response: Business Relationship Managers will work with the business community to identify training opportunities and tie back to existing training resources by Q2 of 2021. For topics where insufficient training materials exist, the Oracle Team will work with the Training department to develop or source materials as necessary.

Observation 6.D: Change Management Controls

Observation: MARTA has a Change Management policy and procedure in place and changes to the information system followed a change process with approval by Change Advisory Board (CAB). Prior Internal Audit (IA) documents noted that testing of changes has not been documented consistently across the changes selected for the review

Recommendation: MARTA should ensure the proper testing for changes before deploying changes production system and document them for future references and accountability.

MARTA Response: Since the original audit findings of 2019, the Technology Change Advisory board created a testing documentation policy, process, and form to be completed for all production change requests. This policy was subsequently enacted by the Change Advisory Board in February of 2019.

In a partial review of recent change requests, all of the requests contained the required test documentation, but some of the samples lacked full documentation or had varying levels of details supplied.

Management agrees in the importance of testing documentation for all production changes and will apply a zero-tolerance threshold for accurate and complete testing documentation beginning immediately. In addition, By the end of Q4 2020, the Change Advisory Board will provide additional training for all change requestors to ensure that documentation standards are understood and fully reached.

Observation 6.E: Major System Documentation

Observation: MARTA IT traditionally has not had Business Analyst positions to create documentation for major systems. IT is working to improve product documentation.

Recommendation: MARTA should create a standardized process for product documentation that will capture the processes for System Administration, Maintenance, Enhancements, Retirement Planning, Core Features, Roles and Responsibilities, etc. MARTA should have processes in place to review and update the documentation on an ongoing basis.

MARTA Response: While many standard operating procedural documents exist for the systems in the Technology Portfolio, the department does not have a standard procedure or staffing model in place for producing them. By the end of Q1 2021, the Technology Department will produce a standard policy, process, and template for developing Standard Operating Procedural documentation for all major systems managed by the MARTA Technology department. Additionally, the department will identify a single storage location for all existing and future documentation developed. Once the policy has been established the system's administration teams will develop and maintain all missing Standard Operating Procedures.

Observation 6.G: Information Security Contractors

Observation: The Information Security team consists entirely of contractors with an exception of the CISO. MARTA is in the process converting these roles to full-time employees.

Recommendation: MARTA should continue to prioritize establishing, classifying, and recruiting for full time Information Security positions.

MARTA Response: MARTA is already committed to staffing the Information Security department with FTEs as the GM/CEO, budget office and senior leadership have approved six FTE positions for FY21, and we are currently in the process of filling those positions.

Observation 7.A: Lack of Job Success Rubric and Strategy

Observation: MARTA lacks a completed or approved job success rubric or cohesive strategy. As a result, there is a risk that employees are not clear on their performance expectations, and MARTA cannot develop internal action items to promote performance improvement and career development across the enterprise. MARTA is in process of configuring its Halogen performance management tool and supporting business processes to streamline and enhance performance management capabilities across the enterprise.

Recommendation: MARTA should continue to develop and prioritize the job success rubric, HR strategy, and performance management tools to foster a clear and consistent performance management environment.

MARTA Response: HR recognizes the need to develop the job success rubric and strategy as part of the strategic development of a redefined Performance Management system. We are currently working with a cross-functional team of stakeholders to improve Authority adoption and engagement with performance management, to result in achievement of organizational goals and priorities. One tangible aspect of the redefined performance management program is the development of an appropriate job success rubric for introduction across the organization by December 30, 2020.

Observation 7.B: Lack of HR Technology Strategy and IT Roadmap

Observation: MARTA's Human Resources department does not have an overarching technology strategy or IT Roadmap defining how HR-enabling systems are integrated, deployed, and leveraged. HR indicated that they often feel as though they are not able to use systems to their full capability due to a lack of training and systems that are not as advanced as other parts of the Authority.

Recommendation: MARTA should develop appropriate trainings for HR employees to better utilize the existing systems. In addition, the HR department should develop an IT strategy and roadmap to layout a formal plan for current and desired technology to address current and anticipated technology needs.

Observation 6.G: Information Security Contractors

MARTA Response: With respect to the specific training needs of the HR employees, the management team has begun polling staff to determine their specific, individual training needs. First, to ensure the team is up-to-date and engaged with the current technology infrastructure, we plan to reinforce skills by offering cross level training. Secondly, we will focus on skill-specific training to bridge the gaps that may exist for staff that may be responsible for utilizing a technology tool. This will be an ongoing process for the Department.

The Department has actively implemented a plan to develop an HR Technology Strategy and IT Roadmap. We are embarking on this initiative ensuring that the technology strategy aligns with our overall business strategy. The HR Leadership team have met to discuss the specific technology needs for each office. HR and IT Leadership have met multiple times to discuss the development of the HR IT Roadmap. IT has designated a project lead to support this effort. The HR Leadership Team has shared an initial prioritized list sequencing the various automation needs with IT. The Department plans to define its Technology Strategy and develop an IT Roadmap that leverages technology to improve our organizational efficiency, as well as to connect with the workforce and other internal stakeholders.

Observation 7.C: Lack of Automated Resumé Vetting

Observation: The iRecruitment tool leveraged by MARTA to review resumes does not have a key word search function available to vet resumes. As a result, HR personnel must look through each resume manually. This manual practice can increase the time required to fill a position and increases the risk that qualified applicants may be overlooked, and unqualified applicants may make their way to the interview process.

Recommendation: MARTA should review options for enhancing or configuring its deployed iRecruitment tool or consider implementing an additional tool to help them efficiently and effectively vet applicants.

MARTA Response: The Department has actively implemented a plan to develop an HR Technology Strategy and IT Roadmap. HR and IT Leadership have met multiple times to discuss the development of the HR IT Roadmap. During the most recent meeting the project team agreed to explore automated resume vetting tools as an immediate priority. The team believes this may be a quick win in the context of the overall technology enhancements that the HR department is exploring. The Department plans to have a funding request to align with the FY22 budget planning cycle.

Observation 8.B: Timekeeping Process Opportunities within Bus and Rail Operations

Observation: The timekeeping process for represented bus and rail operators is cumbersome, relies on exception reporting on behalf of dispatchers to gather accurate time charges for operators, and results in additional review and reporting activities for Payroll staff.

Recommendation: MARTA should evaluate potential options for deploying a time and attendance solution for represented operators to promote real-time logging of operator time worked instead of dispatcher exception reporting, where possible in accordance with MARTA's labor agreement and federal regulations.

MARTA Response: MARTA will evaluate our current processes and systems used to track and manage operator time. We will determine if there is a more efficient process and/or system currently available, warranted, and financially feasible.

Low Priority Recommendations

Observation 6.F: Reporting of Success Metrics for Information Security

Observation: The Information Security team lacks mature processes to produce success metrics.

Recommendation: MARTA should explore the use of IT tools and innovative processes to find cost effective means to generate and report success metrics and KPIs for Information Security

MARTA Response: Information Security has been working with the Office of Research and Analysis to mature and automate security metrics. This consists of using PowerBI, where applicable, to produce certain metrics that provide visibility into MARTA's security posture. Other metrics, such as the status of the Risk Management Framework implementation and PCI status, are currently produced manually. Feasibility of automated metrics in this area is being explored.

Observation 6.J: Priority Information Security Items

Observation: Information Security has identified and working on a priority list of items to improve cybersecurity performance and capabilities. This list includes Virtual Desktop Infrastructure (VDI), Cloud multi-factor authentication, and advanced End-Point protection using machine learning, which continuously checks for anomalous behaviors and responds to them.

Recommendation: MARTA should continue their evaluation of threats, mitigation tools and available options and perform cost/benefit analysis of various options to prioritize their implementation.

MARTA Response: Information Security continually looks to improve MARTA's security posture by utilizing NIST's Risk Management Framework (RMF) as the overarching security framework for the Authority. The implementation of controls is focused on the CIS Top 20 critical security controls. Information security looks to utilizing free or low-cost options from MS-ISAC (Multi State Information Sharing & Analysis Center), where applicable, to meet some of the control objectives. One of those items form MS-ISAC is Malicious Domain Blocking and Reporting which blocks all outbound requests to malicious entities. MARTA conducts advanced email filtering and blocking utilizing industry standard tools. MARTA also has systems in place from MS-ISAC, that alert on attempted attacks on its infrastructure. As the program matures, Information Security is constantly evaluating new protection mechanism to meet the security controls outlined in the RMF program.

Observation 10.A: Lack of Designated Quality Assurance Role in Customer Service

Observation: The Customer Service department does not have a quality assurance function in place to confirm that customer complaints are addressed and that tickets are closed with the proper explanation.

Recommendation: MARTA should consider designating a position as a quality assurance role related to customer service tickets and performance. This position could be filled through a new position or through internal training.

MARTA Response: The Office of Customer Services acknowledges that there isn't a staffing resource dedicated to performing the quality assurance role of reviewing HEAT tickets and ensuring thorough and accurate responses are provided to customer concerns. Having this function as an employee's main focus would be a great benefit to the customer service complaint process, assist in improving customer satisfaction and have a budgetary impact. Customer Service will assess the feasibility of creating a designated quality assurance position

Observations With No Recommendation

Observation 2.A: Existence of Rail Operations Policies and Procedures

Observation: Rail Operations policies and procedures are in place to promote safe and effective operations of rail service and the maintenance of facilities, vehicles, and right of way. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.

Recommendation: N/A

MARTA Response: N/A

Observation 4.A: Existence of Mobility Services Policies and Procedures

Observation: Mobility Services policies and procedures are in place for both MARTA and its service providers to promote safe and effective paratransit operations in accordance with applicable compliance requirements. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.

Recommendation: N/A

MARTA Response: N/A

Observation 4.B: Mobility Performance Monitoring in Alignment with Industry Practices

Observation: Mobility Services maintains and publicly reports KPIs that align with industry standards for public transit organizations. Additional internal performance monitoring practices and metrics are in place throughout the Mobility Services to provide actionable information to management and promote performance accountability.

In addition, Mobility Services has comprehensive contract oversight procedures in place to monitor contract performance, hold the service provider accountable, and incorporate into the Department's performance reporting.

Recommendation: N/A

MARTA Response: N/A

Observation 6.H: Information Security Collaboration with IT

Observation: The Information Security team works closely with the IT team to manage the security of various MARTA enterprise systems. The Information Security team provides their inputs for Information Security aspect, while the IT team manages the implementation, operation and maintenance of the enterprise systems. Both teams have effectively managed their respective responsibilities.

Recommendation: N/A

MARTA Response: N/A

Observation 6.I: No Major Information Security Vulnerabilities Identified

Observation: The US Department of Homeland Security (DHS) performed an extensive evaluation of MARTA networks during preparations for Super Bowl LIII in 2019. The audit concluded that there were no major infiltration vulnerabilities identified in the MARTA infrastructure.

Recommendation: N/A

MARTA Response: N/A

Observation 8.A: Existence of Payroll Policies and Procedures

Observation: Payroll policies and procedures are in place to promote effective payment of employees according to regulations and labor agreements. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.

Recommendation: N/A

MARTA Response: N/A

Observation 9.C: Inventory Asset Management Processes in Line with Industry Practices

Observation: MARTA's inventory asset management processes leverage enterprise-wide technology solutions (including Oracle and FA Suite) and generally align to industry standard practices. No significant deficiencies were noted.

Recommendation: N/A

MARTA Response: N/A

1. General Observations

Sections 2 through 10 provide the outputs of KPMG's analysis, observations, and recommendations related to each specific functional area. During fieldwork and analysis, KPMG identified observations and recommendations that span across multiple functional areas and are applicable to the broader Authority enterprise. These observations are included below.

Policy and Procedure Review and Approval

The processes by which policies and procedures [including Standard Operating Procedures (SOPs)] are approved is inconsistent across the Authority. Throughout the functional areas review, KPMG observed instances in which existing, approved "formal" policies and procedures were outdated. In some instances, draft procedures have been developed to reflect current practices, systems, and regulatory requirements; however, these procedures have not been approved and distributed. KPMG also observed inconsistent practices of regularly reviewing policies and procedures on a periodic basis (i.e. annually or biennially).

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 1.A: Insufficient Enterprise-Wide Policy and Procedure Review and Approval Processes
Observation: MARTA lacks a structured and effective method to update and approve policies and procedures in a timely manner and review on a regular basis. This increases the risk that as processes and/or regulations change, policies and procedures are not reviewed, updated and approved to reflect those changes. As a result, employees may not have access to or knowledge of updated processes, posing the risk that employees will not perform required functions properly.
Recommendation: MARTA should develop a structured process to review and update policies and procedures, including a defined approval matrix and a timely cadence (i.e. annually). In addition, MARTA should hold individuals accountable for not updating or approving procedures in accordance with the developed policy.

Observation 1.A: Insufficient Enterprise-Wide Policy and Procedure Review and Approval Processes

MARTA Response: MARTA has in the past maintained a centralized approach to circulating, reviewing and approving policies and procedures. In addition, the organization has successfully advanced the development of Safety and Security policies and procedures as well as the development of the newly-revised Employee Handbook, which we are getting ready to be released. We are continuously evolving and improving our processes, and intend to further streamline our approach to the review and approval process. Currently we are assessing the opportunity to re-establish this centralized function in the Chief of Administration Department.

Enterprise Data Management

MARTA has two enterprise level data management solutions that can be used for performance monitoring and reporting. The Oracle Enterprise Resource Planning (ERP) system is bundled with Oracle Business Intelligence Enterprise Edition (OBIEE), which is a proven Data Management solution with analytics capabilities. As part of its enterprise data management approach, MARTA has opted to utilize OBIEE in a limited capacity because of restrictive pricing and the complexity of integration with other enterprise systems.

In addition to OBIEE, MARTA has invested in Microsoft's PowerBI platform. PowerBI is primarily deployed to address tactical needs within individual business or operational functions. MARTA has used the tool to measure various bus and rail performance data, safety data, customer inputs, ridership patterns, incidents and other information. MARTA has also addressed overtime payment issues by monitoring the data and mitigating the issues in a systematic manner. The PowerBI solution is also used by MARTA finance and administrative functions, as well as the C-suite, as a decision support tool and dashboard. While OBIEE and PowerBI are each capable data management solutions and can support MARTA's vision of leveraging data for measuring efficiencies and supporting effective decision making, the current usage of the data management solutions at MARTA is fragmented and performed on an ad-hoc basis. During interviews, various members of the MARTA leadership team expressed their desire to make further investment into the tools and leverage the full power of data management capabilities for predictive and advanced analytics, as opposed to the current approach of relying on backward-looking data primarily for reporting purposes.

Various performance reports, KPIs and dashboards are created to address specific needs of each department. Given the wealth of data MARTA generates and has access to, MARTA may be able to achieve strategic improvements by effectively integrating existing and potential new/enhanced data sources. The entire MARTA organization may benefit in terms of operational efficiency, management visibility, and performance transparency from an enterprise-wide data management strategy and a deployment of a single fully integrated data and reporting platform leveraging existing data management solutions. Such a solution would integrate data from multiple disparate systems and provide end-to-end visibility into operational efficiencies and organizational effectiveness, Benefits may include enabling "what if" analysis, enhanced data modeling capabilities, and "slicing and dicing" information. Driving data-driven decision making would help MARTA to shift from reactionary data usage focusing on historical trends to predictive analytics. Potential use cases include enhanced real-time information for customers, data monetization, and cost-savings associated with service and process efficiencies throughout the enterprise.

The table below provides a summary of KPMG's high-level observations regarding MARTA's current and potential data management across four key components.

Data Management Component	Observed MARTA Maturity	Potential MARTA Maturity
Data Collection	High	High
Data Platforms	Medium-High	High
Data Analysis	Low-Medium	High
Data Integration	Low-Medium	High

To drive enhanced performance across the enterprise, MARTA's Office of Research and Analysis is currently in progress of reviewing and redesigning Key Performance Indicators (KPIs) and measurement bands across the Authority to develop meaningful metrics for driving performance and operational insights in a way that aligns to the Authority's strategic priorities. The Office of Research and Analysis is working to develop a clear, consistent, data-driven methodology for setting KPI targets and performance bands and has initiated discussions with KPI owners to revise and streamline MARTA's current strategic KPIs and drive enhanced functionality and usage of dashboards across the Authority.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 1.B: Opportunity for Performance Management Strategy
Observation: MARTA leverages various tools for its enterprise data management platform. The Oracle ERP is bundled with Oracle Business Intelligent Enterprise Edition (OBIEE), which is a powerful data management and analytics tool. However, MARTA utilizes OBIEE in a limited capacity. Microsoft PowerBI appears to be MARTA's preferred data management platform – which is used for KPI reporting and various report generation. Inconsistent utilization and lack of integration across critical data sources limits the effectiveness and value of the information presented in reports and dashboards.
Recommendation: MARTA should perform an assessment of the feasibility and potential benefits of a single fully integrated data management and analytics platform to avoid wasteful duplication of effort in two systems and allow access to reporting information from critical systems in a single source. MARTA should develop a formal data management strategy based on the outputs of the assessment

Observation 1.B: Opportunity for Performance Management Strategy

MARTA Response: In 2019, MARTA strategically identified the need to make better data-driven decisions to improve service and increase operational efficiency, and the Office of Research and Analysis was tasked by senior management to build on MARTA's existing performance management strategy to increase transparency, ownership, and accountability for performance throughout the Authority. The Office of Research and Analysis has acted to develop a clear, consistent, data-driven methodology for setting KPI targets; initiated discussions with KPI owners to revise and streamline MARTA's current strategic KPIs and make them more customer focused; and is co-leading a multi-disciplinary team (the Dashboard Development, Deployment, and Utilization Team) to work with each department to: (1) Define KPIs and set targets that align with and support the Authority's strategic goals; (2) automate, to the extent possible, the data sources, systems, and business processes for KPI tracking; (3) develop and deploy dashboards for KPI reporting; and (4) promote a culture of utilizing dashboards as an integral part of the decision-making process.

Observation 1.C: Lack of Data Integration Strategy

Observation: MARTA's current data processing and management efforts are fragmented. The IT team has developed useful dashboards and KPI reporting tools for various departments. However, these efforts are siloed and tailored for the individual departments and their functional needs.

Recommendation: MARTA should formulate an enterprise-wide data integration, management and processing strategy to integrate data from multiple disparate systems. This Enterprise Data Warehousing (EDW) solution can provide MARTA with better insight into their integrated data as well as better analytics.
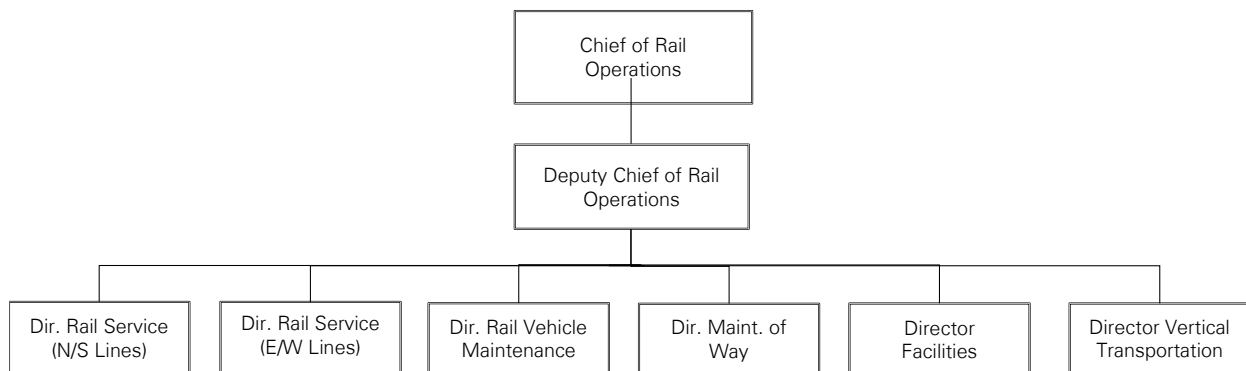
MARTA Response: MARTA has initiated a concerted and disciplined effort driven by the Research and Analysis Department to re-establish its Key Performance Indicators (KPIs) with a standardized methodology and consistent approach across the organization. To support this effort, the IT Department established an Enterprise Data Warehousing and Management team in 2019 with a focus on integrating Oracle and other systems of record to provide better insights and access to information regardless of the source application. This team has put in place and is consistently supporting Power BI and the OBIEE Oracle tools as primary data management tools. There are other standard tools that are actively being utilized to clean and produce data. In addition, MARTA purchased and implemented in 1999 Emvison360 as a centralized document management tool which largely houses all electronic documents (program plans, emergency management plans, blue prints and drawings, policies and procedures, etc.) for the organization as a whole. All of these tools combined are currently meeting our organizational needs. MARTA has not identified a critical or pressing need to adopt an Enterprise Data Management Warehouse platform. That said, we have IT teams entirely dedicated to support the data management functions and needs, and we have the corresponding Research and Analysis teams dedicated to the KPIs efforts which are successfully advancing. As these efforts mature, and we continue to expand our analytics capabilities we might consider a more robust or different approach to data integration, but at the moment this integration is being achieved through alternative means.

2.Rail Operations

Overview

The Division of Rail Operations (Rail Operations) is responsible for operating MARTA's fleet of rail cars as part of regular transit operations across the MARTA service area. Rail Operations is also 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. In addition to the heavy rail fleet, track, facilities, and right of way that have traditionally formed the bulk of MARTA's rail service since the 1970s, in recent years Rail Operations also assumed responsibility for the operation and maintenance of the Atlanta Streetcar light rail fleet and associated facilities and infrastructure from the City of Atlanta. As of FY21, Rail Operations consists of 1,337 budgeted positions (1,331 full time and 6 contractors).

The following organization chart provides an overview of Rail Operations functions.

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                          ┌─────────────────────┐
                          │   Chief of Rail     │
                          │    Operations       │
                          └─────────────────────┘
                                    │
                          ┌─────────────────────┐
                          │ Deputy Chief of Rail│
                          │    Operations       │
                          └─────────────────────┘
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│Dir.Rail│ │Dir.Rail│ │Dir.Rail│ │Dir.    │ │Director│ │Director    │
│Service │ │Service │ │Vehicle │ │Maint.of│ │Facili- │ │Vertical    │
│(N/S    │ │(E/W    │ │Mainten-│ │Way     │ │ties    │ │Transporta- │
│Lines)  │ │Lines)  │ │ance    │ │        │ │        │ │tion        │
└────────┘ └────────┘ └────────┘ └────────┘ └────────┘ └────────────┘
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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.

Rail Operations Policies and Procedures

Rail Operations maintains a catalog of governing documents to promote effective operations and compliance with federal, state, and MARTA Board laws, regulations, policies, and requirements. These governing documents include:

— Standard Operating Procedures (SOPs) and other applicable policy and procedure documents across the Light Rail (Streetcar), Rail Services, Rail Car Maintenance, Maintenance of Way, Facilities, and Vertical Transportation functions

— Maintenance management plans and program documents

— Service Standards which delineate expectations for rail service across the system

KPMG observed that policies and procedures across the Rail Operations functions are detailed, comprehensive, and delineate formal responsibilities for specific processes and activities to help promote effective operations in the highly regulated transit environment. Rail Operations has policies and procedures in place across the wide variety of functions under the Division's purview. These policies and procedures range from maintenance SOPs related to railcars, the rail wayside, and facilities, to procedures for rail incident management and tactical policies governing how vehicles are operated.

In addition to policies and procedures maintained by the Division of Rail Operations, the Division of Safety and Quality Assurance also maintains, executes, and provides oversight and monitoring regarding policies and procedures and management plans for helping ensure and maintain passenger, employee, and environmental safety relevant to MARTA's rail operations.

In 2019, MARTA received the International Standard for Asset Management ISO 55000 certification regarding its enterprise-wide asset management practices, attributable in part to the presence of established policies and procedures that align with industry leading practices around operations, maintenance, and safety.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 2.A: Existence of Rail Operations Policies and Procedures
Observation: Rail Operations policies and procedures are in place to promote safe and effective operations of rail service and the maintenance of facilities, vehicles, and right of way. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.
Recommendation: N/A
MARTA Response: N/A

Performance and Effectiveness Monitoring

Rail Operations has established practices, processes, and metrics in place for monitoring and reporting operational performance and effectiveness. Performance and effectiveness monitoring are categorized into two primary components: Key Performance Indicators and Internal Performance Monitoring.

Key Performance Indicators

The primary monitoring and reporting mechanisms for Rail Operations are Key Performance Indicators (KPIs) that are tracked internally and reported to internal and external stakeholders, including the MARTA Board and the public.

Rail Operations formal KPIs are summarized in the table below.

Function	KPI	Target (FY20)
Rail Service and Maintenance	**On Time Performance (OTP):** Measures how closely service runs to schedule. Departures from origin and arrivals to destination are considered on time if made no longer than 5 minutes after the scheduled times.	95%
	Mean Distance Between Failure (MDBF): Measures the mean distance (rail car miles) between mechanical failures reportable to National Transit Database, i.e., those precluding a rail car from completing its trip or starting its next scheduled trip.	23,000 train miles
	Mean Distance Between Service Interruption (MDBSI): Measures the mean distance (train miles) between lost and delayed trips.	475 train miles
	Complaints per 100,000 Boardings: Measures customer complaints about rail service per 100,000 rail passenger boardings.	1 complaint
Facilities	**Escalator Availability:** Measures the percentage of service hours during which escalators are available for customer use.	98.5%
	Elevator Availability: Measures the percentage of service hours during which elevators are available for customer use.	98.5%
Finance *	**Rail Cost Per Passenger Trip**: Measures operating cost of providing rail service per unlinked passenger boarding.	N/A (Tracked and reported, but no specific target established)

While reported among KPIs for MARTA's Finance Department, this KPI is included within this section for purposes of this report.

The KPIs above align with industry standards for transit performance reporting. These KPIs are reported to the public and external stakeholders through multiple avenues. Rail Operations KPI performance is reported to the Operations and Safety Committee of the MARTA Board of Directors on a monthly basis. Monthly KPI performance is also reported publicly on MARTA's website [Note: at the time of the fieldwork for this report (September 2020), KPIs on the MARTA website had not been updated since March 2020].

Internal Performance Monitoring

Rail Operations uses multiple methods to track and monitor performance at the management level to support decision making, issue resolution, quality assurance, and internal accountability. Using MARTA's PowerBI business intelligence tool, Rail Operations leadership can generate dashboard reports to monitor performance. These dashboards are largely reflective of the Division's formal KPIs, but with information available closer to real-time.

Rail Operations has additional internal processes in place to report and monitor performance across functions. Individual Departments develop and monitor internal reports that provide information of performance across the formal KPIs as well as additional metrics to provide a greater level of visibility into performance which, ultimately, impact the overall KPIs. For example, Rail Car Maintenance produces a weekly report which tracks fleet performance metrics, such as OTP, MDBF and MDBSI, as well as tactical metrics such as delays, lost trips, vehicle/personnel availability, and scheduled maintenance performance. These tactical metrics directly impact MARTA's ability to effectively provide rail service and to meet its formal KPI targets.

Rail Operations conducts regular meetings within Departments, as well as across the Division, to review system performance and metrics, track and escalate issues, and discuss strategic matters relevant to overall system performance and planning.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 2.B: Rail Operations KPIs in Alignment with Industry Standards

Observation: Rail Operations maintains and publicly reports KPIs that align with industry standards for public transit organizations. Additional internal performance monitoring practices and metrics are in place throughout the Division of Rail Operations to provide actionable information to management and promote performance accountability.

Recommendation: While Rail Operations maintains industry standard performance metrics, and demonstrates adherence to or exceedance of metric targets, MARTA should consider additional, customer-centric metrics into formal KPI reporting. This is an emerging trend among leading North American transit and rail agencies. Example metrics for consideration include customer journey time performance, additional platform time, and additional train time. The traditional methodology, and American Public Transportation Association (APTA) standard, for measuring OTP is from terminal to terminal (i.e., start to end of a line). This OTP metric has specific shortcomings, particularly since many customers are not riding lines from terminal to terminal and many also transfer. Generally, customers perceive service delays in terms of additional wait time on the platform or on a train, not based on terminal to terminal OTP.

MARTA should also benchmark against peers to regularly calibrate its target metrics.

MARTA Response: MARTA agrees with clarification. The outward Customer Facing KPI that is referenced, OTP, is a lagging indicator of terminal point to terminal point overall schedule adherence. This is a common and accepted KPI within the industry and MARTA agrees it has limited utility to the Customer. Additional wait time on the platform and on trains are also lagging indicators that report outcomes. MARTA has and will continue to focus on leading indicators or drivers of performance in addition to the more common lagging indicators. This includes operator and fleet availability, fleet reliability, right of way system performance (track circuit, signals, switch performance, power and track conditions), audio and visual information system (AVIS) and elevator reliability and elevator down time. MARTA has also realigned their Rail & Station Management resources to be more focused on the Customer with more direct leadership over rail lines on the system managing the service. MARTA is leveraging their resources in both the Rail Service Control Center (RSCC) and Maintenance Control Center (MCC) to track, trend and assess service calls, service delays and preventable incidents to reduce and/or limit service impacts. This also includes patron behavior that impacts performance. On a case by case basis these indicators will be considered for external consumption.

Observation 2.C: Potential PowerBI Dashboard Enhancements for Rail Operations

Observation: While Rail Operations leverages PowerBI to generate dashboards to provide insights into system performance, existing dashboards largely align directly with MARTA's formal KPIs. MARTA may benefit from enhancements to its dashboard reporting to provide insights into more strategic and tactical data elements.

Recommendation: MARTA should develop enterprise reporting capabilities that provide real-time dashboard and standardized reports and queries. Administrative restrictions and user roles can allow for more advanced users to develop custom reports and queries. For example, existing executive-level reports consist of valuable information that appears to be provided via email. Improvements to dashboarding and reporting capabilities could include a real-time, dynamic PowerBI dashboard that allows users to drill down and filter by areas such as service interruption root causes, delay minutes, line, station, etc.

MARTA Response: MARTA agrees with clarification. MARTA as an agency has invested in Power BI Dashboarding as an effective means to share and consume large amounts of meaningful data. With each passing month new performance reports are being shared at the MARTA enterprise level, at the C-Team level and at the department level within Rail. In addition to On-Time Performance, Ridership, Overtime, Budget Adherence, Customer Performance and State Safety Oversight Reportable Incidents, Rail will look to expand their departmental portfolio of Power BI Dashboard elements to include those discussed in MARTA response to 2.B.

3. Bus Operations

Overview

The Division of Bus Operations (Bus Operations) is responsible for operating and maintaining MARTA's fleet of buses and paratransit (Mobility) vehicles as part of regular transit operations across the MARTA service area. As of FY21, Bus Operations consists of 2,037 budgeted positions (1,909 full time employees, 125 part time employees, and 3 contractors).

The following organization chart provides an overview of Bus Operations functions.

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          ┌──────────────────────────┐
          │  Chief of Bus Operations │
          │     & Urban Planning     │
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                       │
          ┌──────────────────────────┐
          │    Deputy Chief Bus      │
          │       Operations         │
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│   Bus    │  │     Bus      │  │ Mobility Services│
│Transport.│  │ Maintenance  │  │                  │
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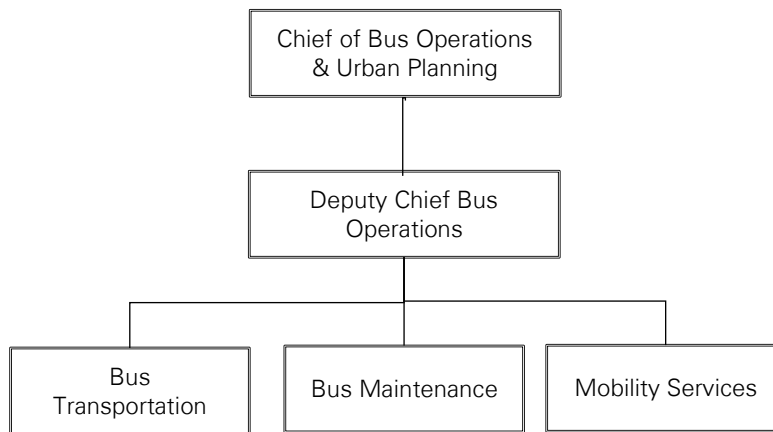
Note: For the purposes of this report, operations of Mobility Services are addressed in Section 3.

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 Division monitors its performance and effectiveness.

Bus Operations Policies and Procedures

Bus Operations has policies, procedures, and other governing documents in place to promote effective operations and compliance with federal, state, and MARTA Board laws, regulations, policies, and requirements. These documents include:

— Standard Operating Procedures (SOPs) and other applicable policy and procedure documents for Bus Transportation, Bus Maintenance

— A Work Rules handbook for Bus and Mobility operators

— Bus fleet maintenance management plans and program documents

— Service Standards which delineate expectations for bus service across the system

KPMG observed that policies and procedures across the Bus Operations functions are detailed, comprehensive, and delineate formal responsibilities for specific processes and activities to help promote effective operations and maintenance of the bus fleet in the highly regulated transit environment. Rail Operations has policies and procedures in place across the wide variety of functions under the Division's purview. MARTA's ISO 55000 certification, as discussed in the Rail Operations section, indicates that Bus Operations' practices support effective enterprise-wide asset management in alignment with industry leading practices.

While Bus Operators policies and procedures are in place, some SOPs are dated and may not accurately reflect current MARTA practices, requirements, and strategic priorities. Bus Operations leadership indicated that procedures are largely dated and that updating these SOPs is an ongoing priority inhibited by resource constraints.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 3.A: Existence of Bus Operations Policies and Procedures
Observation: Bus Operations policies and procedures are in place to promote safe and effective operations of bus service and fleet maintenance. While these policies and procedures exist, some SOPs are dated and may not reflect current MARTA practices, requirements, and strategic priorities.
Recommendation: MARTA should prioritize reviewing Bus Operations SOPs, updating and formally approving where appropriate, and developing a process for periodic review of procedures.
MARTA Response: We concur, solution is in progress. Earlier this year, MARTA identified opportunities for program improvement, and a defined need for procedural discipline. We prepared the job description for a new position, Superintendent – Analysis and Procedures, which is currently moving through early stages of the recruitment process. This will provide priority attention for Operational SOPs, including a structured approach to procedural development, review, updates and approvals. The process will involve designed inputs from/and natural exports to; Training, operational bulletins, incident response and management oversight.

Performance and Effectiveness Monitoring

Bus Operations has established practices, processes, and metrics in place for monitoring and reporting operational performance and effectiveness. Performance and effectiveness monitoring are categorized into two primary components: Key Performance Indicators and Internal Performance Monitoring

Key Performance Indicators

The primary monitoring and reporting mechanisms for Bus Operations are Key Performance Indicators (KPIs) that are tracked internally and reported to internal and external stakeholders, including the MARTA Board and the public.

Bus Operations formal KPIs are summarized in the following table.

Function	KPI	Target (FY20)
Bus Service and Maintenance	**On Time Performance (OTP):** Measures how closely service runs to schedule. Departures are considered on-time, if made between 0 and 5 minutes after the scheduled departure times. OTP for individual bus routes is tracked and publicly reported on MARTA's website.	78.5%
	Mean Distance Between Failure (MDBF): Measures the mean distance (actual vehicle miles) between mechanical failures reportable to National Transit Database, except for those that occur at the end of the line.	7,500 vehicle miles
	Complaints per 100,000 Boardings: Measures customer complaints about bus service (for example, related to on-time performance; operator courtesy, etc.) per 100,000 bus passenger boardings.	8 complaints
Finance*	**Bus Cost Per Passenger Trip**: Measures operating cost of providing bus service per unlinked passenger boarding.	N/A (Tracked and reported, but no specific target established)
Safety and Security *	**Bus Collision Rate:** Measures the number of collisions involving bus service per 100,000 miles.	3.8 collisions

While reported among KPIs for other MARTA departments, these KPIs are included within this section for purposes of this report.

The KPIs above align with industry standards for transit performance reporting. These KPIs are reported to the public and external stakeholders through multiple avenues. Bus Operations KPI performance is reported to the Operations and Safety Committee of the MARTA Board of Directors on a monthly basis. Monthly KPI performance is also reported publicly on MARTA's website [Note: at the time of the fieldwork for this report (September 2020), KPIs on the MARTA website had not been updated since March 2020].

Internal Performance Monitoring

Like Rail Operations, Bus Operations uses multiple methods to track and monitor operational and maintenance performance. Bus Operations leverages PowerBI dashboarding capability to view and track dashboards similar to the sample shown to the right. As noted in the Rail Operations section, these dashboards are largely reflective of the Division's formal KPIs, but with information available closer to real-time.
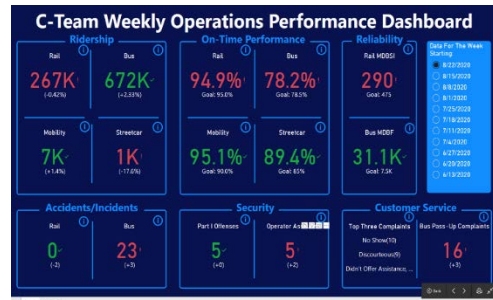
Sample PowerBI Dashboard

Bus Operations also has additional processes and structures in place to support ongoing performance monitoring above and beyond KPI reporting. For example, the Chief of Bus Operations conducts daily briefing calls to review system status, performance, and issues. The calls are attended by leadership and key personnel from each Department within Bus Operations, as well as representation from Customer Service, External Affairs, and other functions. During these morning meetings, the Departments discuss relevant information for the day ahead, such as weather conditions and special events, as well as information from the previous day. During meetings KPMG observed, Customer Service provided an overview of key complaints and commendations received. Bus Transportation reviewed the previous day's on time performance and discussed situations that contributed to specific delays on the system. Vehicle, operator, and maintenance technician availability and requirements are discussed for each Department. This operational data and tactical matters directly contribute to MARTA's ability to achieve its Bus Operations KPIs.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 3.B: Bus Operations KPIs in Alignment with Industry Standards
Observation: Bus Operations maintains and publicly reports KPIs that align with industry standards for public transit organizations. Additional internal performance monitoring practices and metrics are in place throughout the Division of Bus Operations to provide actionable information to management and promote performance accountability. Many of the executive-level reports are provided via email with embedded images, text, and tables
Recommendation: MARTA should continue to collect and track KPIs and should benchmark against peers and to regularly calibrate its target metrics.
MARTA Response: We concur, encouragement acknowledged. MARTA will continue to collect and track KPI. We do occasionally benchmark against peers to reconcile targets and evaluate progress. MARTA will further engage our Statistical resources to continue this practice and seek continuous process and performance improvements.

Observation 3.C: Potential PowerBI Dashboard Enhancements for Bus Operations

Observation: While Bus Operations leverages PowerBI to generate dashboards to provide insights into system performance, existing dashboards largely align directly with MARTA's formal KPIs. MARTA may benefit from enhancements to its dashboard reporting to provide insights into more strategic and tactical data elements.

Recommendation: MARTA should develop enterprise reporting capabilities that provide real-time dashboard and standardized reports and queries. Administrative restrictions and user roles can allow for more advanced users to develop custom reports and queries. For example, existing executive-level reports consist of valuable information that appears to be provided via email. Improvements to dashboarding and reporting capabilities could include a real-time, dynamic PowerBI dashboard that allows users to drill down and filter by areas such as bus road call root causes, vehicle type, route, location, etc.

MARTA Response: We concur, shared interest in full potential of Power BI. Bus Operations will endorse efforts to leverage existing benefits of Power BI in supporting further dashboard and report level information useful in the daily and strategic leadership of the department.
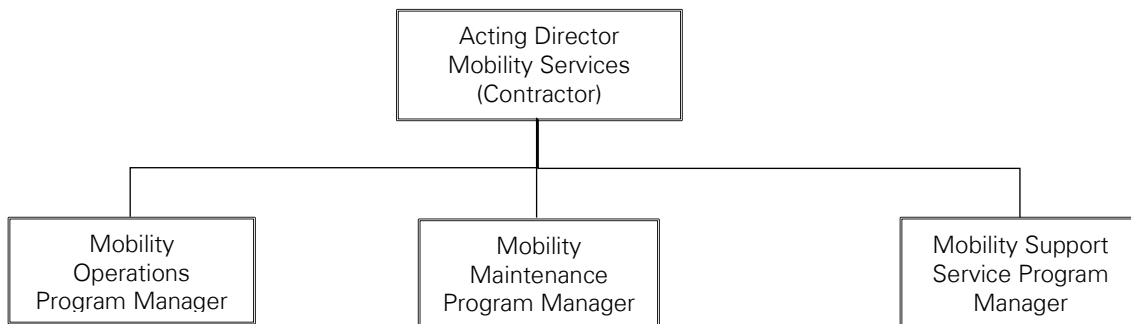
4. Mobility Operations

Overview

The Department of Mobility Services (Mobility), within the Division of Bus Operations, is responsible for providing paratransit service to eligible passengers throughout the Authority's service area in accordance and compliance with the Americans with Disabilities Act (ADA) and Title VI of the Civil Rights Act. Eligible passengers include those unable to use traditional fixed route bus and rail service due to disability or medical condition, as well as a personal care attendant as authorized by a medical professional. Passengers must complete an application and an in-person functional assessment to confirm eligibility for the paratransit service. At the time of this report, due to the COVID-19 pandemic, in-person functional assessments were suspended and existing passengers whose eligibility was due to expire were automatically extended for an additional six months.

After previously providing paratransit service in-house, since 2016 MARTA has used third party contractors to provide "turnkey" paratransit operations. Current service providers include:

— MV Transit provides approximately 2/3 of MARTA's paratransit revenue hours and maintains paratransit fleet vehicles at MARTA's Brady Avenue Facility

— Gresham Transportation Services (GTS) provides approximately 1/3 of MARTA's paratransit revenue hours and maintains vehicles out of MARTA's Hamilton Mill Facility

— Medical Transportation Management (MTM) performs passenger functional assessments, as well as travel training to help passengers transition from paratransit to fixed route service

In the outsourced environment, MARTA Mobility has retained responsibility for customer eligibility processing, the Mobility customer call center, and trip reservations, as well as oversight of contracted service providers.

The following organization chart provides an overview of Mobility Services functions. The current Acting Director of Mobility Services is a contract position.

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                    │   Acting Director   │
                    │  Mobility Services  │
                    │    (Contractor)     │
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│   Mobility    │   │   Mobility    │   │ Mobility Support│
│  Operations   │   │  Maintenance  │   │ Service Program │
│Program Manager│   │Program Manager│   │     Manager     │
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KPMG performed the following tasks related to 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 Mobility Department monitors its performance and effectiveness.

Policies and Procedures

MARTA Mobility has policies, procedures, and other governing documents in place to promote effective operations and compliance with federal, state, and MARTA Board laws, regulations, policies, and requirements. In particular, paratransit operations are heavily regulated through the ADA and Federal Transit Administration Circular 4710.

MARTA Mobility has SOPs and policies in place to govern paratransit operations, safely interacting with customers, and other critical aspects of providing paratransit service. In addition to MARTA's SOPs, each of MARTA's contractual service providers maintains SOPs governing their operations, which MARTA routinely reviews as part of contract management and oversight processes.

KPMG observed that policies and procedures for MARTA and its service providers are detailed, comprehensive, and delineate formal responsibilities for specific processes and activities to help promote effective paratransit operations.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 4.A: Existence of Mobility Services Policies and Procedures
Observation: Mobility Services policies and procedures are in place for both MARTA and its service providers to promote safe and effective paratransit operations in accordance with applicable compliance requirements. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.
Recommendation: N/A
MARTA Response: N/A

Performance and Effectiveness Monitoring

Mobility Services has established practices, processes, and metrics in place for monitoring and reporting operational performance and effectiveness. For Mobility Services, performance and effectiveness monitoring are categorized into two primary components: External Reporting and Contractual Oversight Monitoring.

External Reporting

The primary external reporting mechanisms for Mobility Services are Key Performance Indicators (KPIs) that are tracked internally and reported to internal and external stakeholders, including the MARTA Board

and the public. Similar to Rail and Bus Operations, Mobility Services uses PowerBI dashboarding capabilities to monitor KPI performance internally.

Mobility Services formal KPIs are summarized in the table below.

Function	KPI	Target (FY20)
Mobility Service	**On Time Performance (OTP):** Measures percentage of Mobility customer pickups made within 30 minutes from the scheduled pickup times.	90%
	Mean Distance Between Failure (MDBF): Measures the mean distance (actual vehicle miles) between mechanical failures reportable to National Transit Database, i.e., those precluding a vehicle from completing its trip or starting its next scheduled trip.	15,000 vehicle miles
	Missed Trip Rate: Measures the percentage of Mobility trips in which a vehicle arrives outside the 30 minute on-time window (early or late) and the passenger does not ride.	0.5%
	Reservation Average Call Wait Time: Measures the average time a customer waits in queue while making a Mobility reservation.	120 seconds
	Reservation Call Abandonment Rate: Measures the percentage of customers who terminate a call while waiting in queue to make a MARTA Mobility reservation.	5.5%
	Complaints per 1,000 Boardings: Measures customer complaints about Mobility service (for example, on-time performance; operator courtesy; etc.) per 1,000 MARTA Mobility boardings.	4 complaints
Finance*	**Mobility Cost Per Passenger Trip**: Mobility Cost per Passenger Trip measures operating cost of providing Mobility service per unlinked passenger boarding.	N/A (Tracked and reported, but no specific target established)
Safety and Security *	**Mobility Collision Rate:** Measures the number of collisions involving Mobility service per 100,000 miles.	2.5 collisions

While reported among KPIs for other MARTA departments, these KPIs are included within this section for purposes of this report.

The KPIs above align with industry standards for transit performance reporting. Similar to Rail and Bus Operations, Mobility KPIs are reported to the MARTA Board on a monthly basis, as well as posted to the MARTA website [Note: at the time of the fieldwork for this report (September 2020), KPIs on the MARTA website had not been updated since March 2020]. MARTA also reports KPIs and other key performance information to the MARTA Accessibility Commission (MAC), an oversight board consisting of representatives from local organizations focused on the needs of people with disabilities.

MARTA Mobility also operates under additional compliance requirements due to a consent decree issued in 2002 regarding the Authority's paratransit operations. To monitor compliance with consent decree requirements, Mobility Services provides various additional performance metrics to the Authority's Office of Diversity and Inclusion for tracking and reporting. Additional performance metrics tracked as part of this reporting include rides of excessive length, number of vehicles available for service, and enhanced detail on reservation call center performance.

Contractual Oversight Monitoring

Mobility Services has procedures in place to regularly monitor and report on the performance of its contracted service providers as part of their ongoing operations of paratransit service and the maintenance of the Mobility fleet. Mobility Services compiles weekly and monthly reports on each service provider, tracking the provider's performance across a variety of key statistics relevant to their ability to meet contractual and service obligations. Sample metrics tracked include:

— The KPI metrics above relevant to each service provider

— Manpower reports showing service provider resources that were available, called out, late, etc., to ensure sufficient staff coverage

— Complaints by category (e.g. late pickups, unsafe driving, poor customer service)

Each service provider has contractual performance targets in place. MARTA tracks performance for these targets and may increase or decrease amount owed on invoices by issuing a contractual incentive for exceeding performance targets or assessing liquidated damages for failing to meet targets.
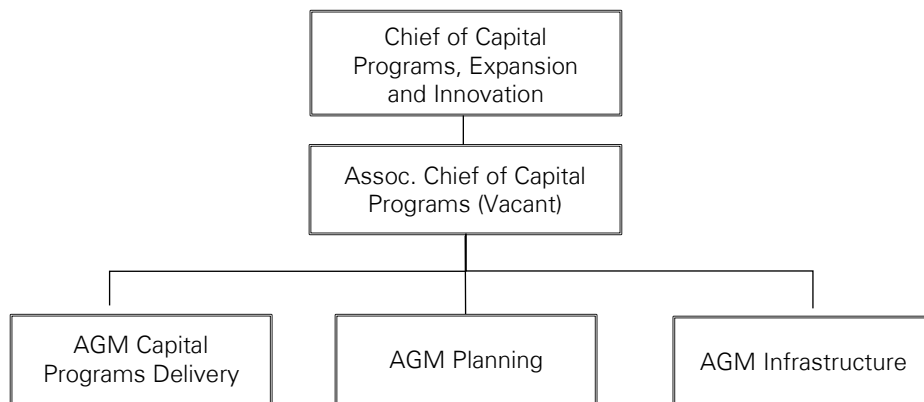
Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 4.B: Mobility Performance Monitoring in Alignment with Industry Practices
Observation: Mobility Services maintains and publicly reports KPIs that align with industry standards for public transit organizations. Additional internal performance monitoring practices and metrics are in place throughout the Mobility Services to provide actionable information to management and promote performance accountability. **In addition,** Mobility Services has comprehensive contract oversight procedures in place to monitor contract performance, hold the service provider accountable, and incorporate into the Department's performance reporting.
Recommendation: N/A
MARTA Response: N/A

5. Capital Projects

Overview

The planning and administration of capital projects within MARTA are overseen by the Department of Capital Programs, Expansion, and Innovation. This Department oversees the planning, design, and project management of capital projects throughout the Authority. The organization chart below illustrates how this function is structured.

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│   Chief of Capital      │
│ Programs, Expansion     │
│   and Innovation        │
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             │
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│  Assoc. Chief of Capital│
│   Programs (Vacant)     │
└─────────────────────────┘
             │
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┌──────────────┐ ┌──────────────┐ ┌──────────────────┐
│ AGM Capital  │ │ AGM Planning │ │ AGM Infrastructure│
│Programs Delivery│ │              │ │                  │
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Responsibilities within the Department of Capital Programs, Expansion, and Innovation is structured according to the typical lifecycle of a capital project, as follows:

— The AGM of Planning is responsible for the planning of projects and programs within the capital portfolio

— The AGM of Infrastructure (reporting to the AGM of Capital Programs Delivery) is responsible for overseeing design and engineering for capital projects

— The AGM of Capital Programs Delivery oversees the Authority's project management and construction functions

KPMG performed the following tasks related to Capital Projects as part of this Management Audit:

— Review relevant policies and procedures for existence and quality and 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 and evaluated.

Policies and Procedures

In 2017, MARTA's Department of Internal Audit performed a review of the Authority's Capital Improvement Program (CIP). This review identified numerous observations and recommendations focusing on a lack of consistent and centralized project management activities. The review noted that as many as 26 project management offices (PMOs) across the Authority were responsible for delivering the CIP. The review recommended the creation of the organization that would become the Department of Capital Programs, Expansion, and Innovation. In the interim years, MARTA has focused on developing a centralized program management office (CPMO) function that would consolidate activities previously dispersed throughout the Authority, drive process consistency, and enhance governance over capital projects. The transition of the Authority from primarily focusing on maintaining state of good repair of existing infrastructure and assets to planning for system expansion is a primary factor driving the need for greater centralization. With little significant system expansion since the 1990s, the Authority will experience significant growth through projects associated with the Authority's "More MARTA" capital program. The 2017 internal review also documented that gaps existed in the Authority's policies and procedures for capital program management. CIP activities lack consistency across the Authority. The review also noted that project managers were not consistently monitoring project milestones and project management IT systems and integrations were insufficient. The review recommended that centralized SOPs and governance processes be developed and maintained by a CPMO organization.

MARTA's current Chief of Capital Programs, Expansion, and Innovation led an organizational assessment which concluded in April 2020 that identified known issues throughout the capital program and action plans to address these issues. Included within these issues was the lack of centralized and consistent governance and SOPs for planning, budgeting, monitoring, and procuring capital projects. MARTA has rolled out a new governance structure and processes consisting of clear stage gates (i.e., defined decision points and associated authorities) for the capital project lifecycle.

MARTA is currently in the process of centralizing capital program/project management processes, procedures, IT systems, and project controls that are then adhered to by project managers across various business units who are delivering projects. At the time of this report, the Department of Capital Programs, Expansion, and Innovation executing an initiative to develop a catalog of centralized procedures for deployment across the Authority. These procedures are anticipated to be deployed by the end of the Calendar Year 2020 in parallel to work on the CPMO structure, governance, and procedures.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 5.A: Lack of Consistent Capital Program Procedures
Observation: A 2017 internal review identified gaps in capital program management structures and processes, including a lack of documented SOPs to support effective and consistent project/program management across the Authority. Capital program SOPs have not yet been developed. MARTA is in progress on an initiative to deploy procedures for a centralized program management office by the end of Calendar Year 2020.
Recommendation: MARTA should continue to prioritize the development, approval, and deployment of procedures to support effective and consistent planning, budgeting, monitoring, and procurement of capital projects.

Observation 5.A: Lack of Consistent Capital Program Procedures

MARTA Response: Agree. MARTA has made significant strides in establishing a defined process for putting in place centralized, uniformed, cross-functional and accessible procedures. It started with the development of a Governance process which defines approval authority and other defined requirements for project managers. Using the Governance document as a baseline, procedures are being written and staffed for use by project managers regardless of what department they reside in. These procedures will affect project management, construction management, budgeting, cost control, schedule management, and support function interface with Safety and Quality, Grants, and Procurement. Our milestone goal remains the end of Calendar Year 2020 to get procedures in place with robust training beginning in January 2021.

Performance and Effectiveness Monitoring

Similar to capital program policies and procedures, performance monitoring across the capital program has been inconsistent and not sufficiently enabled by technology to promote real-time insights into project status. Project portfolio managers across the Authority have used various methods and tools for monitoring project costs, schedule adherence, and other key data points that ultimately build up to the overall capital program status. This information is compiled by the Manager of CIP Monitoring and Reporting into off-system spreadsheets.

MARTA is implementing and integrating various IT system to support the CPMO, including rolling out Oracle Primavera-based Unifier for management of all projects. Unifier will provide cost data directly from the Authority's Oracle financial system of record to provide enhanced visibility into project financials, while also providing critical project schedule and lifecycle reporting capabilities in a more uniform manner across the Authority.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 5.B: Lack of Capital Project Reporting Integration

Observation: Capital project data management has historically been decentralized and compiled by project portfolio managers across the Authority. Critical cost, schedule, and milestone data is manually tracked and reported for compilation by the Department of Capital Programs, Expansion, and Innovation. MARTA is in the process of rolling out Oracle Unifier functionality which will help integrate this critical data.

Recommendation: MARTA should continue to prioritize the Unifier implementation and develop robust processes and training materials to help enable consistent capital program data integration for monitoring and reporting.
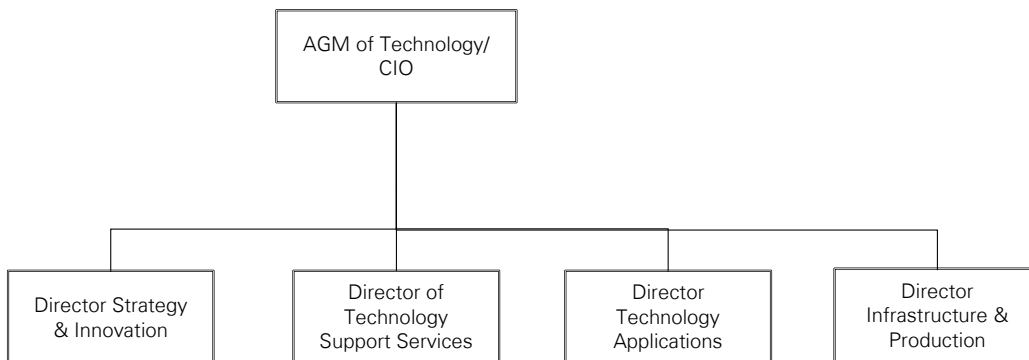
Observation 5.B: Lack of Capital Project Reporting Integration

MARTA Response: Agree. MARTA has embarked on an aggressive program through the use of Oracle Unifier to define and manage all elements of project delivery and cost management. Phase 1 of the Oracle Unifier implementation is complete. Phase 1 included replacing SharePoint for Project Charters and Project Charter Requests with supporting workflows and replacing Microsoft Access for Capital Reports. Cost modules are active in Unifier all of the Oracle Financials (e-business suite) data already populated in the system. Phase 2 will include Project delivery modules specific to program and construction management and supporting workflows as part of procedures development. As these workflows are completed, MARTA will integrate them into Unifier. A fully integrated and functional data management system will allow MARTA to generate reports, track key performance indicators, develop and track budgets, and train project managers on procedures and data management. A subset of rolling out Unifier is to have a procedures manual as well as training manuals. Our milestone goal is March 2021 to be fully integrated and functional.

6. Information Technology and Information Security

Overview

MARTA's Department of Technology (Department or IT) is responsible for managing technology systems and solutions throughout the agency. The IT department is responsible for managing and supporting all technology components within the agency except the Rail Vehicles technologies and Cybersecurity functions – which are managed by separate departments. The IT department is headed by the Chief Information Officer, who reports to the MARTA Chief Administrative Officer.

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                    │  AGM of Technology/ │
                    │        CIO          │
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│ Director │ │ Director │          │ Director │    │ Director │
│ Strategy │ │    of    │          │Technology│    │Infrastru.│
│& Innov.  │ │Technology│          │Applicat. │    │& Product.│
│          │ │ Support  │          │          │    │          │
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The IT group supports MARTA with four major functional areas, each led by their own respective directors:

— Strategy and Innovation is a new department that was established in 2019. This department is responsible for coordinating with user departments to integrate agency-wide strategic business transformation technology initiatives aimed at improving efficiencies and effectiveness of MARTA services

— Technology Support Services provide end user technology support for approximately 3600 active technology users across MARTA

— Technology Applications department supports the agency with lifecycle management support for enterprise applications

— Infrastructure and Production manages the critical technology infrastructure for MARTA, including network systems, datacenter and critical hardware components.

Information Security is a separate department at MARTA reporting to the Chief Administrative Officer. The department is headed by the Assistant General Manager of Information Security/Chief Information Security Officer and supported by seven General Consulting and Professional Service (GCPS) contractors and one MARTA contractor. The department is responsible for security of MARTA systems, hardware components, communication systems and devices. The physical security of the buildings and other properties is managed by MARTA police, while IT is responsible for management of the Data Center.

Key MARTA enterprise systems currently managed by IT include:

— Automated Fare Collection (AFC) – MARTA implemented a smartcard-based Fare Collection System provided by Cubic Transportation Systems. The system is over 10 years old and some of the system components maybe facing obsolescence due to advancements in technologies

— Mobile Ticketing System – to complement their AFC system with a smartphone-based fare media solution, MARTA is underway with their implementation of the Mobile Ticketing solution, provided by Kontron

— Oracle Enterprise Resource Planning (ERP) – MARTA is using Oracle 12i as their ERP suite. The Oracle system is used by many departments across the MARTA enterprise for essential business functions. MARTA uses Oracle for Accounts Payable, Employee Self-Service, General Ledger, Procurement, Inventory, Payroll, Time and Labor, Accounts Receivable, Human Resources, Recruitment, Labor Distribution, Project Accounting, Treasury, Sourcing, Cash Management, Fixed Assets, Order Management and other functions

— Computer-Aided Dispatch (CAD)/ Automatic Vehicle Location (AVL) Scheduling – MARTA uses Trapeze FX software for their scheduling, routes creation and operator assignments. They also use Trapeze CAD for automatic dispatching of vehicles based on the fixed schedule and real-time conditions. The AVL software provides real-time location of MARTA vehicles and provides predicted arrival time

— Enterprise Asset Management (EAM) – MARTA uses Trapeze Assetworks as their EAM suite. This software suite helps MARTA to manage their fixed and rolling stock assets, National Transit Database (NTD) reporting for State of Good Repair (SGR) data and Transit Asset Management (TAM) planning

KPMG performed the following tasks related to Information Technology 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 their performance and effectiveness

Oracle Utilization

MARTA is currently using Oracle 12i as their main Enterprise System. MARTA began implementing Oracle in 2006, providing the opportunity to improve workflow and automate processes throughout the organization. The Oracle system is extensively adopted within the organization and MARTA has no plans to retire the system. The IT team has been working with various functional groups to review and update processes, workflows and functionality of Oracle systems to fix known issues and improve system effectiveness.

MARTA IT and customer departments generally indicated that the Oracle ERP system meets most of their needs. They have identified certain ancillary functions that are better served by other products such as Hyperion for budgeting (an Oracle product implemented separately from the ERP) and Saba tor learning management. The ERP system is bundled with Oracle Business Intelligent Enterprise Edition (OBIEE) that is used in the areas where it is easiest to implement, but MARTA is not fully investing into the reporting and analytics tool because of the prohibitive pricing structure of OBIEE.

As of September 2020, MARTA is working with Oracle to upgrade the software to version 19g, which is scheduled to finish by January 2021. The current software is deployed on-premise at the MARTA data center. MARTA does not have plans to migrate to a cloud hosted solution.

KPMG's 2011 Management Audit noted that MARTA had the opportunity to realize significant benefits from Oracle by enhancing the utilization of current Oracle solutions at MARTA, increasing awareness and training of existing Oracle tools available to MARTA employees, and continuing to implement remaining Oracle modules based on organization strategies and objectives. A holistic review of the business processes to identify the issues/gaps and updating the process workflows would address many of these issues and improve operational efficiencies of most business functions and offer significant cost savings. KPMG team witnessed progress in this regard, with additional opportunity for improvement. Many workflows have been formalized and have been optimized for various business functionals.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 6.A: Oracle Process Improvement Opportunity
Observation: MARTA is working with Oracle to upgrade the software to version 19g, which is scheduled to finish by January 2021. This upgrade provides an opportunity for MARTA to perform a comprehensive review of the processes and explore opportunities to automate many manual processes. The IT team has been working with various functional groups to review and update processes, workflows and functionality of Oracle systems to fix known issues and improve system effectiveness.
Recommendation: As MARTA completes its planned Oracle upgrade, MARTA should undertake a comprehensive exercise to review, update and document business processes associated with the upgraded Oracle ERP for all MARTA user departments and business units. This comprehensive review should emphasize identifying, designing and implementing process enhancements and system configurations to process efficiency and promoting greater enterprise-wide adoption of available Oracle technology.

Observation 6.A: Oracle Process Improvement Opportunity

MARTA Response: MARTA has recently undertaken two efforts to help address this opportunity; The creation of a business process review task force (as part of a larger effort to optimize our annual budget) and a Business Relationship Manager role to assist departments with better utilizing MARTA's technology portfolio of solutions.

In the past 2 years, MARTA recognized the lack of business process engineering skills in the agency to assist in business adaptation to Oracle and other system implementations. Consequently, in FY2020, the Technology department created a new role (Business Relationship Manager) within the office of Innovation and Research to work with departments to understand their business processes, match the resulting automation needs with the agency's technology portfolio, and to assist the departments with adapting their business processes to take full advantage of the available solutions.

Our department hired our first two Business Process Managers and they began work in October of 2020. MARTA will utilize these positions (in coordination with the business process review task force) to help streamline how each department works with our technology and to continually identify opportunities for improvement.

Observation 6.B: Oracle Integration with other Enterprise Systems

Observation: Oracle provides a robust set of Application Programming Interfaces (APIs) for most common integration needs. MARTA has invested significantly into various standalone systems that provide better functional values for MARTA specific needs, such as Hyperion for budgeting, Saba for training management, Clearwater for Investment Accounting and others.

While MARTA has largely integrated Oracle with many systems for various functionality, some enterprise systems such as Clearwater, Unifier, OLIS, Hyperion, P6 are not fully integrated with Oracle. This lack of integration contributes to cumbersome manual processes that are more at risk for errors.

Recommendation: As part of the comprehensive review recommended above, MARTA should review the integration need for Oracle ERP with various in-house enterprise systems. Some of the existing integration processes are rudimentary (data dump, FTP, Excel etc.), which needs to be automated with the use of APIs.

MARTA Response: As a by-product of the North Highland HR assessment, several system integrations were recommended by the team and the Application Support group within the Technology department is beginning the process to sequence and resource plan for those efforts (in time for the FY2022 budget planning cycle).

In addition, the newly staffed Business Relationship Managers will be working with each business unit over the next 6 months to prioritize and sequence needed integrations for inclusion in the FY2022 budget planning cycle. These 2 processes will yield a plan and the resources to integrate those parts of the technology portfolio the merit automation.

Observation 6.C: Oracle User Training

Observation: IT partners with MARTA HR's Learning and Development (L&D) department to develop and deliver Oracle training courses. IT drives Oracle training content development, while L&D delivers the training through its established platforms. Feedback for the Oracle training delivery is largely positive and seems to have improved over the past few years.

Recommendation: MARTA should formalize the Oracle functional and technical training programs. and continually update the program to help ensure that latest functionality, technologies and user needs are reflected.

MARTA's planned upgrade to Oracle 19g is a major upgrade that will require extensive training for MARTA technical and functional users of Oracle system.

MARTA Response: Business Relationship Managers will work with the business community to identify training opportunities and tie back to existing training resources by Q2 of 2021. For topics where insufficient training materials exist, the Oracle Team will work with the Training department to develop or source materials as necessary.

Policies and Procedures

The MARTA IT team is supported by a Senior Compliance Manager, who is responsible for all phases of compliance, operational and Governance Risk and Compliance (GRC) programs and reviews for the department. The compliance manager assists IT with risk management activities and supports department with proactive technology assessments/audit programs, work papers and subsequent audit reports.

In addition, MARTA's Internal Audit Department conducts IT audits, which include reviewing documentation, processes and procedures and internal audits and providing recommendations and corrective action plans in accordance with the Government Auditing Standards, the Information System Auditing Standards adopted by the Information Systems Audit and Control Association (ISACA), the Center for Internet Security (CIS) Control Objectives and the National Institute of Standards and Technology (NIST) standards. The KPMG Team reviewed the internal audit documents provided by MARTA for the review of MARTA's Network Configuration, End-user Security, supervisory control and data acquisition (SCADA) systems, Audio-Visual Information System (AVIS) project upgrades and Enterprise Information Technology Architecture (EA) effectiveness.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 6.D: Change Management Controls

Observation: MARTA has a Change Management policy and procedure in place and changes to the information system followed a change process with approval by Change Advisory Board (CAB). Prior Internal Audit (IA) documents noted that testing of changes has not been documented consistently across the changes selected for the review.

Observation 6.D: Change Management Controls

Recommendation: MARTA should ensure the proper testing for changes before deploying changes production system and document them for future references and accountability.

MARTA Response: Since the original audit findings of 2019, the Technology Change Advisory board created a testing documentation policy, process, and form to be completed for all production change requests. This policy was subsequently enacted by the Change Advisory Board in February of 2019.

In a partial review of recent change requests, all of the requests contained the required test documentation, but some of the samples lacked full documentation or had varying levels of details supplied.

Management agrees in the importance of testing documentation for all production changes and will apply a zero-tolerance threshold for accurate and complete testing documentation beginning immediately. In addition, By the end of Q4 2020, the Change Advisory Board will provide additional training for all change requestors to ensure that documentation standards are understood and fully reached.

Observation 6.E: Major System Documentation

Observation: MARTA IT traditionally has not had Business Analyst positions to create documentation for major systems. IT is working to improve product documentation.

Recommendation: MARTA should create a standardized process for product documentation that will capture the processes for System Administration, Maintenance, Enhancements, Retirement Planning, Core Features, Roles and Responsibilities, etc. MARTA should have processes in place to review and update the documentation on an ongoing basis.

MARTA Response: While many standard operating procedural documents exist for the systems in the Technology Portfolio, the department does not have a standard procedure or staffing model in place for producing them. By the end of Q1 2021, the Technology Department will produce a standard policy, process, and template for developing Standard Operating Procedural documentation for all major systems managed by the MARTA Technology department. Additionally, the department will identify a single storage location for all existing and future documentation developed. Once the policy has been established the system's administration teams will develop and maintain all missing Standard Operating Procedures.

Performance and Effectiveness Monitoring

IT uses a variety of software and tools to capture the performance data for its services and operations. Similar to other departments, IT uses PowerBI for data reporting of internal performance. PowerBI is integrated with multiple systems for automated data reporting without manual data entry. These systems include:

— SolarWinds for server health monitoring and reporting for their servers

— Service Desk software for help desk data

— Primavera P6 for IT capital projects performance data

In addition to this automated data collection, IT provides feedback surveys on their service level to various users within organization. The survey feedback data compilation and reporting are performed by third-party vendor Forrester.

While IT has established service levels and tracking mechanisms, Information Security has not developed mature processes and data collection and integration methods to effectively monitor and report on its performance in a formal, structured approach.

Sample IT PowerBI Dashboard

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 6.F: Reporting of Success Metrics for Information Security
Observation: The Information Security team lacks mature processes to produce success metrics.
Recommendation: MARTA should explore the use of IT tools and innovative processes to find cost effective means to generate and report success metrics and KPIs for Information Security.
MARTA Response: Information Security has been working with the Office of Research and Analysis to mature and automate security metrics. This consists of using PowerBI, where applicable, to produce certain metrics that provide visibility into MARTA's security posture. Other metrics, such as the status of the Risk Management Framework implementation and PCI status, are currently produced manually. Feasibility of automated metrics in this area is being explored.

Information Security

As a standalone department at MARTA the Information Security department is responsible setting up policies and procedures for securing the MARTA IT systems, assets and network. MARTA created a single Information Security policy document in 2013, which was subsequently revised in 2016. MARTA has divided the single policy documents into multiple independent documents by relevant sections and the department continues to update them on a regular basis.

As an acceptor of credit cards for the Fare Payment system, MARTA is responsible to adhering the Payment Card Industry Data Security Standards (PCI-DSS) and maintaining PCI compliance. Based on the annual volume of transactions (between 1 million and 6 million), MARTA is classified as a level 2 merchant. The PCI compliance scope for MARTA includes relevant software [Customer Relationship Management (CRM), AFC Backend, Credit/Debit Processing modules, device software and other)], hardware (workstations, vending machines, point of sales terminals and other), network components (switches, encryption, communication devices) and processes (access control, password policy, data retention policy and other).

Documentation of security Policies and Procedures is a primary focus for the team. Information Security reviews and updates the procedures on an annual basis. A core team is responsible for updating the processes, which the CISO and CIO are required to review and approve prior to acceptance.

The Information Security team works closely with the IT Department to manage the security of MARTA enterprise systems such as ERP, EAM, Intelligent Transportation System (ITS) and others. The IT team is responsible for the implementation of enterprise systems while the Information Security team provides their inputs on the security related requirements.

While attacks against firewalls and attempts to scan the firewalls for vulnerability and reputation score are common, there has not been a significant incident/attack on MARTA network to date. The US Department of Homeland Security (DHS) performed an extensive evaluation of MARTA networks during preparations for Super Bowl LIII in 2019. The audit concluded that there were no major infiltration vulnerabilities identified in the MARTA infrastructure.

Information Security has identified and is working on a priority list of items to improve cybersecurity performance and capabilities. This list includes Virtual Desktop Infrastructure (VDI), Cloud multi-factor authentication, and advanced End-Point protection using machine learning, which continuously checks for anomalous behavior and responds accordingly.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 6.G: Information Security Contractors

Observation: The Information Security team consists entirely of contractors with an exception of the CISO. MARTA is in the process converting these roles to full-time employees.

Recommendation: MARTA should continue to prioritize establishing, classifying, and recruiting for full time Information Security positions.

MARTA Response: MARTA is already committed to staffing the Information Security department with FTEs as the GM/CEO, budget office and senior leadership have approved six FTE positions for FY21, and we are currently in the process of filling those positions.

Observation 6.H: Information Security Collaboration with IT

Observation: The Information Security team works closely with the IT team to manage the security of various MARTA enterprise systems. The Information Security team provides their inputs for Information Security aspect, while the IT team manages the implementation, operation and maintenance of the enterprise systems. Both teams have effectively managed their respective responsibilities.

Recommendation: N/A

MARTA Response: N/A

Observation 6.I: No Major Information Security Vulnerabilities Identified

Observation: The US Department of Homeland Security (DHS) performed an extensive evaluation of MARTA networks during preparations for Super Bowl LIII in 2019. The audit concluded that there were no major infiltration vulnerabilities identified in the MARTA infrastructure.

Recommendation: N/A

MARTA Response: N/A

Observation 6.J: Priority Information Security Items

Observation: Information Security has identified and is working on a priority list of items to improve cybersecurity performance and capabilities. This list includes Virtual Desktop Infrastructure (VDI), Cloud multi-factor authentication, and advanced End-Point protection using machine learning, which continuously checks for anomalous behaviors and responds to them.

Recommendation: MARTA should continue their evaluation of threats, mitigation tools and available options and perform cost/benefit analysis of various options to prioritize their implementation.
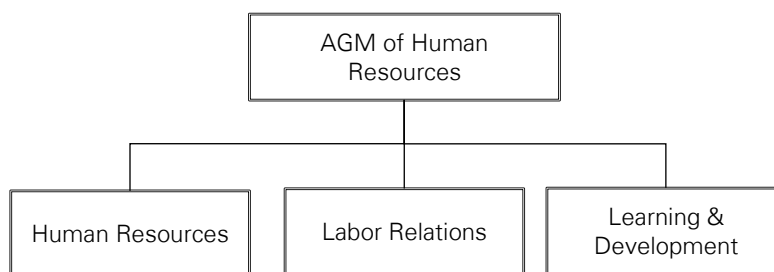
MARTA Response: Information Security continually looks to improve MARTA's security posture by utilizing NIST's Risk Management Framework (RMF) as the overarching security framework for the Authority. The implementation of controls is focused on the CIS Top 20 critical security controls. Information security looks to utilizing free or low-cost options from MS-ISAC (Multi State Information Sharing & Analysis Center), where applicable, to meet some of the control objectives. One of those items form MS-ISAC is Malicious Domain Blocking and Reporting which blocks all outbound requests to malicious entities. MARTA conducts advanced email filtering and blocking utilizing industry standard tools. MARTA also has systems in place from MS-ISAC, that alert on attempted attacks on its infrastructure. As the program matures, Information Security is constantly evaluating new protection mechanism to meet the security controls outlined in the RMF program.

7. Human Resources

Overview

The Department of Human Resources (HR) includes the Office of the AGM of Human Resources, the Office of Human Resources, the Office of Labor Relations, and the Office of Learning and Development. HR responsibilities include employee administration, new-hire training, enterprise learning, workforce diversity and equal opportunity initiatives, and labor relations. HR's core mission is to enhance MARTA's effectiveness through the development of MARTA's human resources programs.

The organization chart below illustrates the structure of HR functions within MARTA:

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                    ┌──────────────────┐
                    │  AGM of Human    │
                    │   Resources      │
                    └──────────────────┘
                             │
         ┌───────────────────┼───────────────────┐
┌──────────────────┐ ┌──────────────────┐ ┌──────────────────┐
│ Human Resources  │ │ Labor Relations  │ │   Learning &     │
│                  │ │                  │ │  Development     │
└──────────────────┘ └──────────────────┘ └──────────────────┘
```

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.

Policies and Procedures

MARTA's Human Resources department has a variety of policies and procedures in place surrounding employee administration. MARTA personnel indicated that the organization has been in the process of updating and revamping these policies and procedures. As such, in order to gain an accurate perspective on the state of the HR department, KPMG included these newly drafted policies and procedures in the review. KPMG also met with members of the Human Resources department to inquire further regarding the day to day workings and possible gaps employees see in their procedural process and documentation. MARTA is also in the process of addressing gaps observed in an assessment of the HR function delivered by the North Highland Company in 2019. KPMG reviewed this report along with the observations noted to determine the gaps that have already been addressed.

In reviewing the presently approved policies and procedures, KPMG observed that the majority of these documents were outdated, some aged over 20 years. This observation is consistent with findings in the 2019 North Highland HR Assessment. Per recommendations provided in the assessment, MARTA launched a program to refurbish their HR policies and procedures. However, as noted in the General Observations contained in Section 1, obtaining timely approval of these newly drafted documents has

been challenging. KPMG confirmed this observation upon review of the refreshed policies and procedures set to be approved. For instance, each drafted procedure included a date in which the procedure was to be signed and approved. Despite dictating deadlines in the procedures, the approvals were overdue, and as such, many of these process documents remain in draft form. A lack of structure in the procedure approval processes resulted in untimely review and approval of updated policies.

MARTA personnel provided draft policies and procedures including the MARTA Employee Handbook. The drafted Employee Handbook includes comprehensive guidance surrounding employee administration. KPMG noted that this handbook is still in draft form and is awaiting final approval before being made readily available to employees. However, similarly to the observation noted above, MARTA did not meet the final approval deadline noted in the handbook in addition to missing the deadline stated in variety of other refreshed policies. This lack of timely approval contributes to available published policies being outdated in comparison to current organizational practices, increasing the risk that employees are not adhering to or aware of current legal, ethical or administrative standards presently in place at the organization.

In addition to these policies and procedures, KPMG identified the following relevant areas for improvement:

— MARTA does not have an overarching HR strategic plan in place. MARTA indicated that this is currently in progress based on a prior finding in the 2019 North Highland HR Assessment.

— MARTA's HR department does not currently have a job success rubric in place. This exposes MARTA to a risk that employees' performance is not measured equally across the organization. There is also a risk that employees are unable to gain an understanding of what is expected of them and how those expectations are benchmarked and measured. KPMG noted that the Employee Handbook references a Performance Management and Evaluation process and HR does have a Compensation – Performance Management policy. However, these documents do not provide a clear picture of the performance evaluation process or benchmarking measures. MARTA's HR department did confirm that they are in the process of developing a job success rubric and have created working group to help create a comprehensive guide**.**

KPMG also noted that many of the observations listed in this section may echo the observations found in the 2019 North Highland HR Assessment, as COVID-19 has highly impacted office and departmental function.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 7.A: Gaps in Job Success Rubric and Strategy
Observation: MARTA lacks a completed or approved job success rubric or cohesive strategy. As a result, there is a risk that employees are not clear on their performance expectations, and MARTA cannot develop internal action items to promote performance improvement and career development across the enterprise. MARTA is in process of configuring its Halogen performance management tool and supporting business processes to streamline and enhance performance management capabilities across the enterprise.
Recommendation: MARTA should continue to develop and prioritize the job success rubric, HR strategy, and performance management tools to foster a clear and consistent performance management environment.

Observation 7.A: Gaps in Job Success Rubric and Strategy

MARTA Response: HR recognizes the need to develop the job success rubric and strategy as part of the strategic development of a redefined Performance Management system. We are currently working with a cross-functional team of stakeholders to improve Authority adoption and engagement with performance management, to result in achievement of organizational goals and priorities. One tangible aspect of the redefined performance management program is the development of an appropriate job success rubric for introduction across the organization by December 30, 2020.

Technology Utilization

MARTA HR personnel utilize several systems as part of ongoing operations: Saba Learning Management System, Halogen performance management system, PowerBI business intelligence, and Oracle HRIS and ERP functionality.

MARTA HR personnel utilize the Oracle HRIS system to carry out certain aspects of employee administration, including job requisitions, applicant hiring, training assessments, etc. KPMG reviewed the user guide and procedural documents provided by the HR department. However, the user guide as well as the procedural documents are not up to date. Similar to the observations above, the lack of updated guidance surrounding the HRIS system increases the risk that the Authority is not using the HRIS system appropriately or to its full capacity. MARTA personnel also stated that they feel as though they are not using the Oracle platform to its full capacity and that they seem to fall behind when it comes to implementing new and more efficient technology.

MARTA utilizes MARTA Learn, powered by Saba, to elicit training and record attendance and certifications. MARTA indicated that MARTA Learn records training completion time and date as well as training progress. HR personnel noted that the HR department is only responsible for delivering new employee onboarding and training as all technical training has been moved to the operations department.

HR personnel further indicated that, for their purposes, the iRecruitment tool currently deployed is outdated and does not fulfill current business needs. The iRecruitment tool does not have the ability to search resumés for key words, requiring hiring managers to review all resumes submitted. This manual practice can increase the time required to fill a position and increases the risk that qualified applicants may be overlooked, and unqualified applicants may make their way to the interview process.

MARTA's HR Department does not currently have a technology roadmap in place. HR indicated that they often feel as though they are not able to use systems to their full capability due to a lack of training and systems that are not as advanced as those in other parts of the Authority. It is an industry and general business best practice to ensure that systems are mapped out for each department and that organization performs periodic evaluations on system usage and effectiveness to ensure optimal business performance.

KPMG also observed current HR KPIs are not optimizing department function. In order to assist an organization to reach its maximum performance, it is vital to correctly identify KPIs that demonstrate how technologies and the department are functioning. While MARTA leverages PowerBI to collect data and measure KPIs, MARTA does not effectively utilize KPIs available to the organization based on the amount of data collected.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 7.B: Lack of HR Technology Strategy and IT Roadmap

Observation: MARTA's Human Resources department does not have an overarching technology strategy or IT Roadmap defining how HR-enabling systems are integrated, deployed, and leveraged. HR indicated that they often feel as though they are not able to use systems to their full capability due to a lack of training and systems that are not as advanced as other parts of the Authority.

Recommendation: MARTA should develop appropriate trainings for HR employees to better utilize the existing systems. In addition, the HR department should develop an IT strategy and roadmap to layout a formal plan for current and desired technology to address current and anticipated technology needs.

MARTA Response: With respect to the specific training needs of the HR employees, the management team has begun polling staff to determine their specific, individual training needs. First, to ensure the team is up-to-date and engaged with the current technology infrastructure, we plan to reinforce skills by offering cross level training. Secondly, we will focus on skill-specific training to bridge the gaps that may exist for staff that may be responsible for utilizing a technology tool. This will be an ongoing process for the Department.

The Department has actively implemented a plan to develop an HR Technology Strategy and IT Roadmap. We are embarking on this initiative ensuring that the technology strategy aligns with our overall business strategy. The HR Leadership team have met to discuss the specific technology needs for each office. HR and IT Leadership have met multiple times to discuss the development of the HR IT Roadmap. IT has designated a project lead to support this effort. The HR Leadership Team has shared an initial prioritized list sequencing the various automation needs with IT. The Department plans to define its Technology Strategy and develop an IT Roadmap that leverages technology to improve our organizational efficiency, as well as to connect with the workforce and other internal stakeholders.

Observation 7.C: Lack of Automated Resumé Vetting

Observation: The iRecruitment tool leveraged by MARTA to review resumes does not have a key word search function available to vet resumes. As a result, HR personnel must look through each resume manually. This manual practice can increase the time required to fill a position and increases the risk that qualified applicants may be overlooked, and unqualified applicants may make their way to the interview process.

Recommendation: MARTA should review options for enhancing or configuring its deployed iRecruitment tool or consider implementing an additional tool to help them efficiently and effectively vet applicants.

Observation 7.C: Lack of Automated Resumé Vetting

MARTA Response: The Department has actively implemented a plan to develop an HR Technology Strategy and IT Roadmap. HR and IT Leadership have met multiple times to discuss the development of the HR IT Roadmap. During the most recent meeting the project team agreed to explore automated resume vetting tools as an immediate priority. The team believes this may be a quick win in the context of the overall technology enhancements that the HR department is exploring. The Department plans to have a funding request to align with the FY22 budget planning cycle.

8. Finance

Overview

The Department of Finance (Finance) responsibilities include accounting, budgeting, payroll, and treasury. Finance Offices include: Accounting, Management and Budget, Revenue Operations, Treasury, and Parking Services. For this Management Audit, KPMG reviewed the Finance Department payroll function.

The payroll function at MARTA is housed in the Office of Accounting (Accounting). Accounting serves as the primary source of financial and management information for MARTA by managing MARTA's accounting system policies, procedures, and functions. Specific accounting functions include: payroll, general disbursements, revenues, cash, receivables, construction, real estate, fixed assets and property control, inventories, cost allocations, insurance program and special projects. Please see the organization chart included below:

```
                    ┌──────────────────────────┐
                    │ Sr. Director & Controller │
                    └──────────────────────────┘
                                 │
                    ┌──────────────────────────┐
                    │    Mgr. of Accounting     │
                    │ Payroll Admin & Cost Analysis │
                    └──────────────────────────┘
                                 │
        ┌────────────────────────┴────────────────────────┐
┌──────────────────┐                           ┌──────────────────┐
│ Sr. Cost Analyst │                           │ Sr. Cost Analyst │
│     Payroll      │                           │  Cost Analysis   │
└──────────────────┘                           └──────────────────┘
┌──────────────────┐                           ┌──────────────────┐
│   Cost Analyst   │                           │   Cost Analyst   │
└──────────────────┘                           └──────────────────┘
┌──────────────────┐                           ┌──────────────────┐
│  Accountant II   │                           │  Accountant II   │
└──────────────────┘                           └──────────────────┘
┌──────────────────┐
│    Accounting    │
│  Specialist III  │
└──────────────────┘
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│    Accounting    │
│   Specialist II  │
└──────────────────┘
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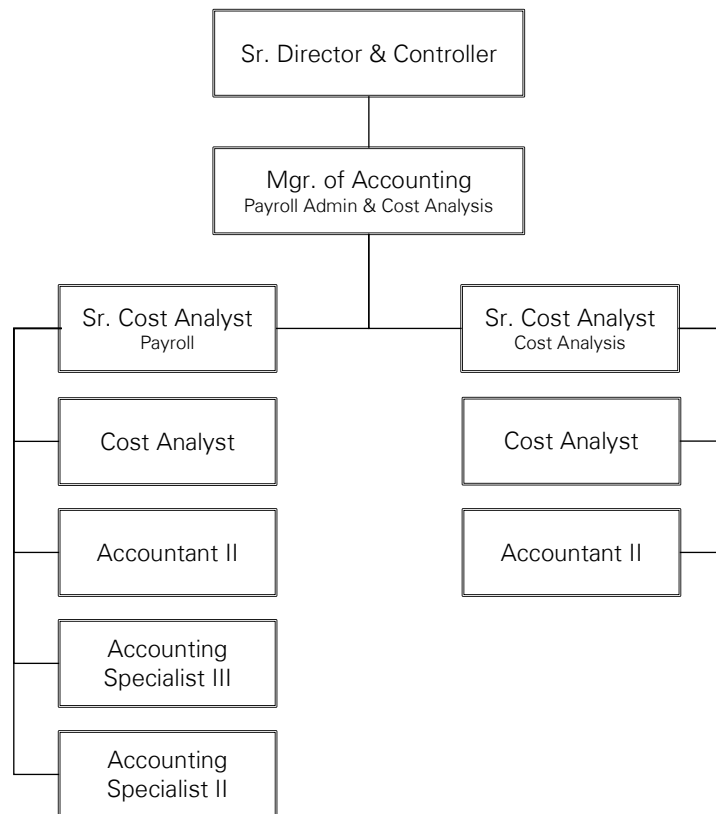
For this Management Audit, KPMG reviewed the Finance Department payroll function. KPMG performed the following tasks related to Finance as part of this Management Audit:

— Review policies and procedures related to employee payroll for existence and quality.

— Assess the efficiency and accuracy of the payroll process

Note: While observations below are applicable to the "Payroll function," this function incorporates inputs and outputs from multiple areas within the Authority, including payroll processing in Finance, employee data management in HR, and timekeeping throughout the organization.

Policies and Procedures

MARTA has a collection of payroll policies and procedures in place including the following: Attendance Reports, Biweekly Off-Cycle Payments and Standard Operating Procedures for Payroll Processing. KPMG reviewed these documents to confirm their existence and ensure they are of sound quality. KPMG noted that all expected policies and procedures were present. Information regarding wages and pay periods is included in the Employee Handbook, which were reviewed as a part of the Human Resource section of this audit. However, some of the policies and procedures including the Garnishment procedure and PTO procedure were not signed and updated in a timely manner. Although these procedures appear to be complete and include the required signatures, the signoffs provided were not completed in a reasonable time span. To clarify, the PTO procedure is dated as of July 2019 but was not signed and approved until January 30, 2020. Based on business best practices, this review and approval is not considered timely. Additionally, the Oracle Closing Procedure was not signed or dated. As a result, KPMG could not verify that the procedures were up to date or reviewed prior to its issuance. Although this procedure is not likely to change significantly year over year, it is a best practice to include dates to ensure that MARTA employees can make note of changes in the process since the creation of the procedures.

Furthermore, KPMG reviewed a series of Operational Audits published by MARTA's Internal Audit department. The Employee Time Reporting Controls Audit states that the current "honor system" in place creates a reporting risk not yet mitigated. Please defer to the recommendation as follows: "MARTA's Technology Department should ensure that ALL current Badge Readers are operational at the Bus and Rail Maintenance Facilities. Aside from the use of Biometric verification, badge readers greatly minimize employees' sharing of username and pin to clock one another in. A badge reader offers better clock in/out control since it requires that employees tap in with their own badges as they would when entering MARTA buildings, therefore thwarting sharing of sign-on credentials. It provides more security, is easier, plus it eliminates the need for manual time entry." As this report was published in June 2020, additional observations are not necessary.

MARTA maintains payroll policies and procedures surrounding the Authority's labor agreements. Per discussion with the payroll department personnel and review of documentation provided, represented payroll policies are based on union contracts which are subject to strict federal regulations. As such, there is limited risk surrounding the contracts or policies created in conjunction with such contracts. However, MARTA recently implemented new automations in the Oracle system surrounding the Family and Medical Leave Act (FMLA) which may need to be incorporated into procedures during the next review cycle. As such, KPMG recommends that the during the upcoming policy and procedure review, MARTA should seek to include the mentioned updates in the newly issued procedures in order to mitigate the risk of duplicated or inaccurate information transfer between departments.

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 8.A: Existence of Payroll Policies and Procedures

Observation: Payroll policies and procedures are in place to promote effective payment of employees according to regulations and labor agreements. No significant deficiencies were observed in the maintenance or execution of the policies and procedures.

Recommendation: N/A

MARTA Response: N/A

Efficiency and Accuracy

MARTA's payroll process begins when an employee is hired and entered using three methods:

— Oracle Time and Labor (OTL) for non-represented employees

— FA Suite maintains schedules for represented non-operator employees and feeds time schedule data to OTL

— Trapeze maintains schedules for represented bus and rail operators and feeds time schedule data to Teledriver

OTL is a self-service system in which an employee will enter time worked on a timesheet and submit. Supervisors approve their direct reports' timesheets after payroll lock. For represented bus and rail operators, routes and assigned operators are maintained in Trapeze to determine anticipated schedules for timekeeping purposes. Dispatchers are responsible for entering any exceptions to timekeeping (i.e. driver was late, did not show, worked overtime, or was replaced). Teledriver transfers data into Oracle on a bi-weekly basis. In order to gain comfort over the completeness and accuracy of hours entered into the system, MARTA personnel run daily payroll error reports to maintain compliance with prescribed rules and guidance. MARTA payroll confirmed that there are no manual calculations in the payroll process and that previously manual payments, such as child support and deferred compensation, are now automated. For further accuracy confirmation, the Accounting Department performs reconciliations between payroll and Oracle reports to confirm information is complete and accurate.

The daily error reports provide comfort that prescribed rules in Oracle are functioning properly. MARTA maintains an additional system external to Oracle which allows for setup and processing of additional involuntary garnishments external to Oracle. All wage payments are made to employees through the ACH direct deposit system or through a Bank of America paycard program. In the case that an off-cycle payment is required, payroll personnel confirmed such payments are made via direct deposits/paycard as well.

To gain further comfort over the accuracy of these payments, MARTA personnel also review a payroll detail adjustment report to attempt to identify the root causes of recurring off-cycle payments. At the end of the year, MARTA creates W-2s for eligible employees; MARTA did not need to issue W-2C correction forms in 2019 or 2020 forms to correct employee salary, wage, or tax information.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

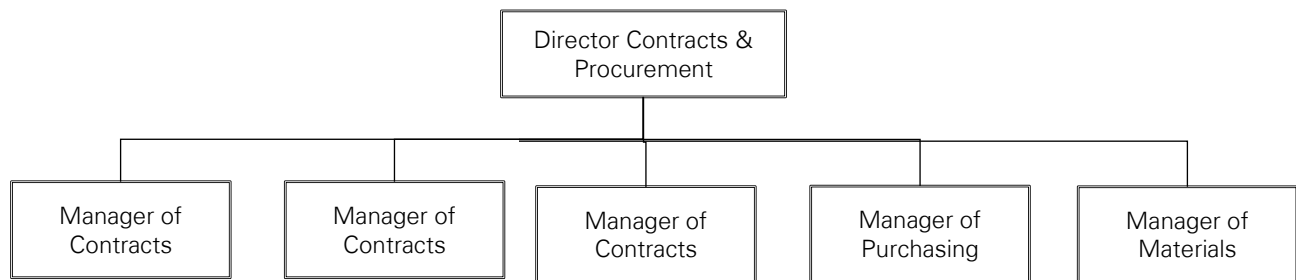| **Observation 8.B: Timekeeping Process Opportunities within Bus and Rail Operations** |
|---|
| **Observation:** The timekeeping process for represented bus and rail operators is cumbersome, relies on exception reporting on behalf of dispatchers to gather accurate time charges for operators, and results in additional review and reporting activities for Payroll staff. |
| **Recommendation:** MARTA should evaluate potential options for deploying a time and attendance solution for represented operators to promote real-time logging of operator time worked instead of dispatcher exception reporting, where possible in accordance with MARTA's labor agreement and federal regulations. |
| **MARTA Response:** MARTA will evaluate our current processes and systems used to track and manage operator time. We will determine if there is a more efficient process and/or system currently available, warranted, and financially feasible. |

9. Procurement

Overview

The Office of Contracts & Procurement and Material (CPM) is responsible for the central procurement function for MARTA, responsible for administering the purchasing and contracting of goods and services on behalf of all MARTA departments. Post procurement award, CPM is responsible for management of contracts and inventory.

Responsibilities over CPM have resided in multiple locations within the Authority in recent years. In recent years, Contracts and Procurement responsibilities resided within the Finance Department, while Materials management resided in individual business units. In 2018, Contracts and Procurement was re-assigned underneath MARTA's Chief Counsel; in 2020, Materials management was re-assigned as part of the Office of Contracts & Procurement and Materials. The organization chart below illustrates the current structure of these activities within CPM.

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                    ┌────────────────────┐
                    │ Director Contracts &│
                    │    Procurement      │
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      ┌──────────┬────────────┼────────────┬──────────────┐
┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐ ┌──────────┐
│Manager of│ │Manager of│ │Manager of│ │Manager of│ │Manager of│
│Contracts │ │Contracts │ │Contracts │ │Purchasing│ │Materials │
└──────────┘ └──────────┘ └──────────┘ └──────────┘ └──────────┘
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KPMG performed the following tasks related to 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.

Procurement Process Lifecycle Efficiency

MARTA has established procedures in place governing the procurement of goods and services. Procedures vary based on the type of good/service and the anticipated value of the resulting purchase or contract. For most goods and services, the procurement lifecycle begins when end users in CPM's internal customer departments submit purchase requisitions in Oracle iProcurement, which are then assigned to specific contract managers/specialists based on the purchase type and amount. For most goods and services, procurements range from smaller purchases and contracts that do not require Board approval to large Requests for Proposals (RFPs) or Invitations for Bids (IFBs) which can be multimillion-dollar transactions that require multiple approval thresholds and up to or over a year to execute.

The table below highlights the average time required to execute various types of contracts (from date of assignment to date of contract execution) during FY20.

Procurement Type	Average Days to Execution (FY20)
Letter of Agreement contracts	56 days
RFP Contracts less than $200,000	135 days
RFP Contracts greater than $200,000	170 days
RFQ contracts	162 days
Invitation for Bid contracts	317 days
Overall average for all contracts	120 days

While MARTA's transit environment adds regulatory and policy requirements such as purchasing thresholds, multiple quotes, and additional complexities, the procurement lifecycle, as shown above, can be overly lengthy. KPMG identified the following specific observations of contributing factors to procurement lifecycle inefficiency:

— MARTA uses a combination of automated and manual processes to execute the procurement lifecycle

— While MARTA uses Oracle iProcurement to facilitate requisitions and purchase orders, Oracle contract management functionality has not been deployed and is not being leveraged by CPM. Contract numbers and purchase orders are not linked in Oracle. CPM personnel use Excel spreadsheets to calculate and track contract balances using information pulled from Oracle. This use of "shadow" spreadsheets results in increased process time throughout the procurement and contract administration lifecycle, increases the risk of errors through manual tracking, and reduces visibility into critical procurement and contract management data. *[Note: Please see Section 7: Information Technology for additional information regarding MARTA's enterprise utilization of Oracle]*

— End user departments are responsible for defining the scope of work (SOW) for each requisition. If SOWs are not developed according to MARTA guidelines or leading practice, procurement timelines can be delayed as additional work is required to refine the SOW

— Factors outside of MARTA control, such as contract negotiation complexity extending execution timelines

KPMG also noted the following enhancements in recent years that contribute to overall procurement lifecycle efficiency:

— MARTA has deployed DocuSign as an enterprise contract routing solution to streamline previously manual processes, reduce the use of paper, and shorten the time required to execute contracts

— Changes to MARTA's enabling legislation increased the dollar threshold under which MARTA could execute contracts without Board approval, contributing to more efficient procurement lifecycle times. The Board may now delegate purchases up to $200,000 to the GM/CEO and lower positions based on MARTA policy; previously, the maximum purchase was $100,000, which was lower than many transit peers and contributed to extended procurement timelines

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 9.A: Manual Procurement and Contract Management Processes
Observation: MARTA uses a combination of automated and manual processes to execute key procurement and contract management processes. These processes contribute to extended procurement lifecycle times and may not represent an efficient deployment of procurement resources.
Recommendation: MARTA should conduct an in-depth analysis into its procurement and contract management processes to identify and implement opportunities to streamline and automate these processes. Emphasis should be given to opportunities to optimize MARTA's utilization of existing, enhanced, or new Oracle solutions.
MARTA Response: CPM is currently in discussion with Information Technology to evaluate and deploy a contract management system as well as developing processes for the functionality of a new contract management system.

Observation 9.B: Lack of Oracle Contract Management Functionality
Observation: MARTA does not leverage Oracle functionality to effectively manage contracts. CPM uses "shadow" Excel spreadsheets to manually enter spend data from Oracle and track contract balance information, increasing process time throughout the procurement and contract administration lifecycles, increasing the risk of errors through manual tracking, and reducing visibility into critical procurement and contract management data.
Recommendation: MARTA should evaluate deploying Oracle contract management functionality and developing processes to effectively leverage this functionality.
MARTA Response: CPM is currently in discussion with Information Technology to evaluate and deploy a contract management system as well as developing processes for the functionality of a new contract management system.

Inventory Asset Management Process Effectiveness and Efficiency

Within CPM, MARTA's Materials Management team is responsible for the planning, purchasing, and management of the Authority's inventory of assets and parts. MARTA maintains multiple storerooms at bus and rail facilities to receive, inventory, and issue parts based on work orders from operational departments. As noted in earlier sections, MARTA maintains policies and procedures around asset management, and has received ISO 55000 certification for its enterprise asset management practices, including procurement, maintenance, and disposal.

CPM's primary inventory responsibilities include managing the Authority's inventory investment and maintaining parts availability for maintenance divisions. To meet these responsibilities, CPM leverages multiple systems to effectively inventory and monitor parts and supplies. CPM inventories parts and supplies using the Oracle Inventory module, which tracks the status of last issue date for each item. MARTA has configured Oracle to establish automated minimum/maximum re-order thresholds to aim for no more than a thirty-day supply of most items to effectively manage inventory investment. Based on these thresholds, Oracle generates a suggested reorder report on a weekly basis, which CPM buyers review to create purchase orders for approval and processing according to MARTA policies.

Oracle interfaces with MARTA's FA Suite enterprise asset management solution, which maintenance departments use to generate work orders for specific tasks. Parts are assigned based on their associated task, which can be retrieved from CPM storerooms. Maintenance supervisors can also request orders to move bulk items (such as bolts and screws) that are not associated with specific tasks.

Observations and Recommendations

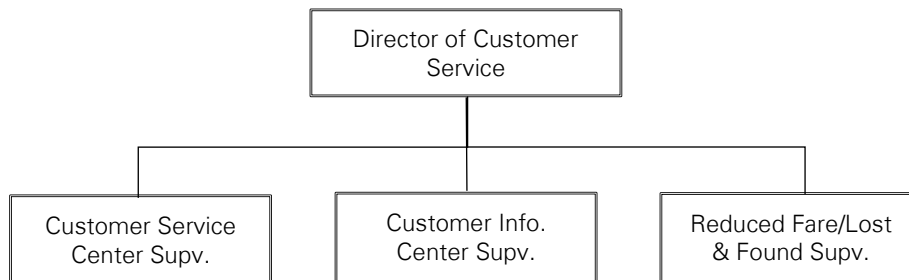| High Priority	Medium Priority	Low Priority	No Recommendation

Observation 9.C: Inventory Asset Management Processes in Line with Industry Practices
Observation: MARTA's inventory asset management processes leverage enterprise-wide technology solutions (including Oracle and FA Suite) and generally align to industry standard practices. No significant deficiencies were noted.
Recommendation: N/A
MARTA Response: N/A

10. Customer Service

Overview

The customer service function within MARTA primarily resides within the Office of Customer Service (Customer Service). Customer Service is responsible for directly interacting with customers, regional partners and potentially new riders, serving as the voice to communicate information, updates and general information on all transit modes. This office receives customer feedback and disseminates this information Authority-wide for trend analysis and making proactive decisions to improve MARTA's ability to meet customer needs.

MARTA customer service focuses principally on external customer service. Leading management practices include measuring and managing internal customer service. The Customer Services business unit manages external customer-based programs impacting public perception of MARTA. The Customer Care Center receives customer feedback, concerns, and requests for bus and rail trip itinerary information. Please see the high-level organization chart included below:

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        ┌─────────────────────┐
        │ Director of Customer│
        │       Service       │
        └─────────────────────┘
                  │
    ┌─────────────┼─────────────┐
    │             │             │
┌─────────┐  ┌─────────┐  ┌──────────────┐
│ Customer │  │ Customer │  │ Reduced Fare/│
│ Service  │  │  Info.   │  │ Lost & Found │
│Center Supv│ │Center Supv│ │    Supv.     │
└─────────┘  └─────────┘  └──────────────┘
```

KPMG performed the following tasks related to Customer Service as part of this Management Audit:

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

Policies and Procedures

The Customer Service department maintains a complete Customer Service Training Manual to map out duties performed by Customer Service personnel. The manual references training surrounding call center training, operational manual and procedure training, a job responsibility overview, system orientation, field training, and other activities. The training manual provides a schedule of a customer service employee's onboarding activities during their orientation. As such, the training manual covers all responsibilities and functions that are expected to be performed by customer service employees. The procedures are robust and well-supported. New employees and trainees also shadow experienced team members in order to better understand and learn the complete customer service process at MARTA.

In addition, the training manual was reviewed and approved in a timely manner. When changes occur to the customer service process, the department distributes updated instructions and changes to all the

relevant employees. As such, KPMG gained confidence that customer service employees receive accurate instructions and procedures to address customer concerns/issues. Although employees are trained appropriately, it is a best practice to update such procedures and training as software or processes change to ensure consistent and up to date training for any newly hired employees. Based on MARTA's process, there are likely to be gaps in the processes and procedures when training new employees. The Customer Service department noted they are planning to review the training manuals in January 2021 to make these manuals Standard Operating Procedure documents. The Customer Service department is also piloting a new mobile ticketing system. KPMG noted that there is not yet a procedure in place for this system.

Customer complaints are entered into MARTA's Help Desk Expert Assistance Tool (HEAT). Customer Service, as well as operations departments, have access to HEAT to track issues and complaints through to resolution. Complaints also have individual tracking numbers which customers can use to track the status of their complaint. PowerBI reports also leverage HEAT data to provide data visualization of trends in customer service issues. While HEAT provides basic functionality, a fully integrated customer relationship management system (CRM) may better enable enterprise-wide customer engagement, issue resolution, and trend reporting.

MARTA's Customer Service department also does not have an employee fulfilling a Quality Assurance (QA) role on the team. QA is primarily performed as part of supervisory duties. It is a leading practice in any industry to ensure quality assurance is performed as human error, miscommunication and inadequate issue resolution can be quite common in customer concerns/complaints.

Observations and Recommendations

High Priority	Medium Priority	Low Priority	No Recommendation

Observation 10.A: Lack of Designated Quality Assurance Role in Customer Service
Observation: The Customer Service department does not have a quality assurance function in place to confirm that customer complaints are addressed and that tickets are closed with the proper explanation.
Recommendation: MARTA should consider designating a position as a quality assurance role related to customer service tickets and performance. This position could be filled through a new position or through internal training.
MARTA Response: The Office of Customer Services acknowledges that there isn't a staffing resource dedicated to performing the quality assurance role of reviewing HEAT tickets and ensuring thorough and accurate responses are provided to customer concerns. Having this function as an employee's main focus would be a great benefit to the customer service complaint process, assist in improving customer satisfaction and have a budgetary impact. Customer Service will assess the feasibility of creating a designated quality assurance position

KPMG

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