Office of Inspector General

Washington Metropolitan Area Transit Authority

Annual Audit Plan Fiscal Year 2020

This Fiscal Year 2020 Annual Audit Plan sets forth the Office of Inspector General's strategy for identifying priority audit issues and managing its workload and resources. As with last year, our planned audits are organized around four focus areas:

- Safety, Reliability and Customer Service
- Financial Management
- Information Technology
- Human Capital and Asset Management

This audit plan aligns with WMATA's 2019-2028 strategic plan entitled "Keeping Metro Safe, Reliable & Affordable." OIG sought input in developing this annual plan from the General Manager/Chief Executive Officer (GM/CEO) and senior WMATA officials. Although the audit plan is a projection of what the Office of Audits would like to accomplish in FY2020, other issues may rise in importance and require our audit resources. Other OIG offices, such as the Office of Investigations, is a more reactive component of the OIG and is therefore not covered in this plan. I look forward to continuing to work with the Board of Directors (Board), WMATA, and other stakeholders in meeting our goals and fulfilling our mission.

I would like to thank the GM/CEO and WMATA management for the collaborative efforts in developing this annual audit plan.

Geoffrey A. Cherrington
Inspector General

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Summary of Planned Audits and Inspections for Fiscal Year 2020

This audit plan is linked with WMATA's 2019-2028 strategic plan entitled "Keeping Metro Safe, Reliable & Affordable." The Strategic Plan identifies the major challenges and critical risk areas facing WMATA, and identifies opportunities for the region to work collaboratively to meet these challenges. OIG audit resources are to be directed in these areas in an optimum fashion.

The process we used to select and prioritize proposed audits was disciplined and risk based. We considered:

1. Mandatory requirements;
2. Critical agency risk areas;
3. Emphasis by the Board, the GM/CEO, or other senior WMATA officials;
4. A program's susceptibility to fraud, manipulation, or other irregularities;
5. Dollar magnitude or resources involved in the proposed audit area;
6. Newness, changed conditions, or sensitivity of an organization, program, function, or activities;
7. Prior audit experience, including the adequacy of internal controls; and
8. Availability of audit resources.

We also developed an audit planning assessment process that considers the nature, scope, trends, special problems, vulnerabilities, and inherent risks of WMATA's programs and operations. Audits that were proposed, prioritized, and ultimately selected were based on this assessment process.

After discussions within the OIG, we used this proposed work to inform discussions with the Board, GM/CEO, senior WMATA officials, and internal compliance groups.

Safety and Customer Service

Safety takes priority at WMATA. Ensuring the safety of WMATA's passengers, employees and infrastructure remains an ongoing challenge. We plan to initiate three audits in this area.

1. **Cybersecurity over Rail Industrial Control Systems** (In process)
   Metrorail uses many systems to ensure the safe and efficient operation of the rail transit system. Critical activities operated through the rail systems include: control of trains, power, station ventilation, voice and data communications, and monitoring of gas and fire sensors. The audit objective is to determine the effectiveness of WMATA's cybersecurity measures designed to protect the rail industrial control systems used by Metrorail.

2. **Rail Performance Monitoring (RPM) System** (In process)
   RPM monitors rail performance, yard management, and helps to manage maintenance of railcars. System functionality and reliability of RPM is critical to the rail operations. The objective is to assess whether the RPM system is performing as intended.

3. **Metrorail Station Garage Cleaning** (In process)
   Customers want facilities to be clean and want to feel safe throughout their journey. WMATA outsourced cleaning at 22 Metrorail station garages. WMATA established specific controls over garage cleaning as well as required the contractor to implement various controls. The audit will assess the effectiveness of garage cleaning under the contract.

Financial Management

WMATA's expense and capital budgets for FY2020 are $2.0 and $1.4 billion, respectively. In order to improve controls to ensure expense and capital dollars are efficiently and effectively spent, we will continue to conduct contract audits in support of WMATA's contracting officers. In addition, we will conduct six other audits in this area.

1. **Contract Audits** (Continuous)
   OIG performs cost or pricing analysis at the request of contracting officers to assist the procurement department in contract negotiations. The objective of these audits is to determine whether the contractor's proposal is based upon current, accurate, and complete pricing data, the contractor complies with Buy America Act requirements; and prospective contractors on major contracts are in sound financial condition and have sufficient resources to perform the contract.

2. **Contracting Officer Technical Representative's (COTR) Function** (In process)
   The WMATA Chief Procurement Officer may delegate responsibilities to qualified Authority employees to assist the Contracting Officer with contract administration and day-to-day technical guidance to the contractor. The audit objective is to determine whether WMATA's COTRs are performing adequate oversight of contract activities.

3. **Fiscal Year 2019 Financial Statements** (In process)
   The WMATA Compact, Section 70, states that an audit shall be made of the financial accounts of the Authority, shall be prepared in accordance with generally accepted accounting principles, and shall be filed with the Chairman and other officers as the Board shall direct. The Board, through the adoption of Board Resolution #2006-18, established the responsibility for the oversight of WMATA's annual independent audit of financial statements by OIG. The objectives of this audit are to:

   - Express opinions on WMATA's financial statements,
   - Review compliance with applicable laws and regulations,
   - Review the controls in WMATA's computer systems that are significant to the financial statements, and
   - Assess WMATA's compliance with Office of Management and Budget's Uniform Guidance.

4. **Fiscal Year 2020 Financial Statements**
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5. **Federal Reimbursable Process**
   For FY2020, WMATA's proposed capital budget is $1.4 billion. WMATA is reimbursed for spending for capital improvement programs including Railcars; Rail Systems; Stations and Passenger Facilities; as well as Bus and Paratransit operations. WMATA has procedures for processing billing, grant drawdowns and Federal Transit Administration reimbursements. This audit will assess the effectiveness and efficiency of WMATA's Federal reimbursement process.

6. **Contract Award Process**
   WMATA is a significant purchaser of goods and services. The audit objective is to determine if (1) contracts were appropriately and effectively executed and administered in accordance with policy, processes and practices, and (2) issued contracts were in compliance with applicable laws and regulations.

7. **Construction Change Order Process**
   WMATA has budgeted approximately $857.4 million for FY2019, and $4.8 billion for FYs 2020-2025, for major construction projects. The audit objective is to determine whether WMATA has effective and efficient internal controls over the identification, pricing, and approval of construction change orders.

Information Technology

Cyberattacks have become more numerous, damaging, and disruptive with new types of incidents emerging frequently. The average cost of a data breach in the United States was $3.6 million in 2018, and the average size of the data breaches was over 31,400 records. We plan to conduct four audits on information technology (IT).

1. WMATA's Data Compromise Response Plan
Cyber intrusion response is an important part of an IT program. While mitigating factors based on the results of risk assessments can lower the number of incidents, not all incidents can be prevented. Organizations can reduce the impact of a cyber intrusion by having an incident response plan. The audit will assess the effectiveness of WMATA's data compromise response plan.

2. Patch Management
Patch management is a critical control to prevent breaches. WMATA has over 350 systems that need to be constantly patched for at-risk software. A patch management deficiency led to a May 2019 ransomware attack in Baltimore, Maryland, which crippled the cities government computers and cost over $18 million to recover. The audit will assess the effectiveness of WMATA's patch management program.

3. Mission Critical Legacy Systems
Some of WMATA's mission critical systems are antiquated and may be at the end of their life cycle. Other critical WMATA systems are approaching end-of-life, as vendors update systems and purge support. As they age, legacy systems can become more expensive to maintain, more exposed to cybersecurity risks, harder to integrate with new technology, and less effective in accomplishing their intended purpose. The audit will identify the mission critical legacy systems in need of modernization and evaluate plans for modernizing these systems.

4. Service Level Agreements
A service-level agreement (SLA) defines the level of service expected from a vendor, laying out the metrics by which service is measured, as well as remedies or penalties should agreed upon service levels not be achieved. SLAs are a critical component of any technology vendor contract. WMATA uses SLAs to procure goods and professional personal IT services. The audit will assess controls over SLAs and delivery of intended results.

Human Capital and Asset Management

Controls over assets are critical to WMATA's programs and activities. WMATA needs to ensure assets are managed appropriately, and programs run efficiently and effectively. We will conduct five audits in this area.

1. **Controls and Accountability over Fuel** (In process)
   WMATA manages over 1,500 non-revenue vehicles and spends about $2.1 million on non-revenue vehicle fuel each year. The audit will examine fuel purchases, delivery and consumption to ensure fuel for WMATA vehicles is being properly used and accounted for. Topics may include the cost of fuel and whether bulk discounts are being provided. Because fuel is a high value, easily transferable item susceptible to theft, control and accountability is essential. The audit will assess whether WMATA has adequate controls and accountability over fuel.

2. **Pension Plans**
   The most significant operating cost drivers are personnel costs, primarily wages and benefits, which account for approximately 70 percent of WMATA expenditures. Reducing pension costs and maximizing pension fund investments continues to be a huge challenge facing WMATA. This audit will assess whether the pension plan program oversight and risk-reward strategies are optimal.

3. **Health & Welfare Fund Management**
   The Health & Welfare Fund supports a plan that offers a comprehensive package of benefits that include medical, prescription drug, dental, vision, life and accident and long-term and short-term disability insurance. The audit will assess the effectiveness of oversight of the fund.

4. **Warranty Management**
   In a typical warranty program, the manufacturer promises to repair or replace equipment in a specific time period. Except for rail operations, WMATA's warranty program was disbanded in 2016 due to budget cuts. The program has since been turned over to the Office of Quality Assurance, Internal Compliance & Oversight. It is critical that a robust warranty program is in place enterprise-wide, which could save millions of dollars. The audit will assess the effectiveness of the warranty program in rail operations.

5. **Management of Surplus Property**
   Surplus property is defined as property that has a re-sale value, but is no longer needed by WMATA to continue operations. WMATA's surplus office processes between $15 and $25 million of excess property a year. This includes property such as furniture, IT equipment, motorcycles, and bikes. The audit will assess the effectiveness of the surplus property program at WMATA.

Authority, Mission and Contact Information

The WMATA OIG was authorized by Board of Directors Resolution 2006-18, approved April 20, 2006. The Office of Inspector General, as an independent and objective unit of the Authority, conducts and supervises audits, program evaluations, and investigations relating to agency activities; promotes economy, efficiency, and effectiveness in agency activities; detects and prevents fraud and abuse in agency activities; and informs agency officials about deficiencies in agency activities as well as the necessity for and progress of corrective action.

Hotline

The OIG Hotline provides WMATA employees, contract employees, and the public with a confidential means of reporting to the OIG instances of fraud, waste, and abuse relating to agency programs and operations.

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