



BALTIMORE CITY DEPARTMENT OF PUBLIC WORKS

Biennial Performance
Audit for Fiscal Years
Ended June 30, 2020 and
2019
City Auditor, Josh Pasch
December 30, 2021



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Office of the Comptroller

Josh Pasch, City Auditor

100 N. Holliday St., Room 321
Baltimore, Maryland 21202

Honorable Bill Henry, Comptroller
and Other Members
of the Board of Estimates
City of Baltimore

Executive Summary

We conducted a *Biennial Performance Audit of the Department of Public Works for the fiscal years ended June 30, 2020 and June 30, 2019*. The objectives of our performance audit were to: (1) assess whether the Department of Public Works' (DPW) policies and procedures adequately address water billing process risks¹; and (2) follow-up on findings and recommendations that were included as part of the previous performance audit report of DPW, dated November 14, 2019. The scope of our audit is fiscal years (FYs) 2020 and 2019, and only included retail water; however, certain other matters, procedures, and transactions outside that period were reviewed to understand and verify information during the audit period.

Our review included the following six functions relevant to the water billing process: (1) setting BOE approved rates in DPW billing systems; (2) customer account set up; (3) meter reading; (4) billing; (5) customer complaints; and (6) collections. Based on our review, DPW has opportunities to improve its formal (written, approved, and dated) policies and procedures to reduce those identified risks and promote compliance, accountability, consistency, and continuity. Specifically,

- **DPW Information Technology (IT) Division** – Although IT Division has the rate setting processes and performs testing before execution of the new rates, these processes are not formally required and documented in policies and procedures or a manual.
- **DPW Meter Shop** – Although it has automated and systematic water meter reading processes (see Water Meters on page 3), it does not have written policies and procedures for meter reading processes for Baltimore City (City) and Baltimore County (County). Also, DPW Meter Shop does not replace water meters until they no longer function properly and does not follow any industry standards.

¹ The original audit objective 1 was to assess the efficiency and effectiveness of the water billing process. At the request of City's leadership team, this audit objective was subsequently changed to assist the DPW management in improving DPW's policies and procedures for water billing process.

- **Customer Service Support Division** – The current Customer Service Support Division (CSSD) policies, procedures, and practices do not:
 - **Customer complaints** - Include the following controls to reduce the risk of not solving billing customer complaints timely: (1) periodic reviewing and revising the benchmarks of the Service Level Agreements (SLA); and (2) periodic systematic monitoring of customer billing complaints to be sure the current benchmarks of the SLAs are achieved.
 - **Billing process** - Reflect the recent management’s initiative of: (1) reviewing exceptions daily (proactive basis) for the City and County accounts; and (2) safeguarding that all accounts are billed.

While reviewing DPW billing processes, our review showed that the City does not take proactive measures to increase water revenue collections. Currently, DPW generates a monthly aging accounts receivable (AR) report (based on criteria such as 30-60-90 days or more) for City accounts, showing which bills are outstanding. However, there are no processes to collect delinquent accounts for the City and the County accounts, which increases the risk of potential financial loss.

The DOA also has a data security concern; a security-related recommendation was communicated to the appropriate DPW and City personnel in the *Confidential Management Comment Limited Use Letter: Department of Public Works Biennial Audit for Fiscal Years 2020 and 2019*. The security related recommendations are omitted from this public report. The decision to exclude this information is based on *Government Auditing Standards, 2018 Revision Technical Update April 2021*, Sections 9.64 - 9.66, *Reporting Confidential or Sensitive Information*.

The prior year recommendation that we followed up during this Biennial Performance Audit was deferred until the FYs 2022 and 2021 audit. (See Section II on page 13).

To improve the efficiency and effectiveness of the water billing process, we recommend the Director of DPW implement the recommendations made in this report. Management responses are included in Appendix I (see page 14).

We wish to acknowledge DPW and Baltimore City Information Technology² (BCIT)’s cooperation extended to us during our audit.

Respectfully,



Josh Pasch, CPA
City Auditor
Baltimore, Maryland
December 30, 2021

² The BCIT maintains County accounts in the 3270 - billing system in the Mainframe (3270 System).

Background Information

The City maintains and provides water to the residences of the City and County. The relationship between the City and the County with respect to water is that the City provides water to the County at cost, and the two jurisdictions share the costs associated with the production and use of water. The City is responsible for the maintenance of all the City and County meters. Between the City and the County, there are over 400,000 water meters. More than half of these meters are in the County.

City and County Accounts

For the City, the DPW Office of Compliance and Research approves accounts for residential homes and the Department of Transportation Right-of-Way section approves commercial accounts. Upon receiving their respective approval, the CSSD's Rates and Revenue section sets up the accounts in the UMAX System, which is the water billing system for City's accounts

For the County, the Baltimore County Permits Department sends the required documentation to CSSD to set up the accounts in the in the 3270 System.

For both the City and the County accounts, there can only be one meter with a unique identification number assigned to each address. For each account, the bill is calculated by the established rate in the water billing systems times the account water consumption. Additionally, City customers are charged sewer fees, a flat infrastructure fee based on meter size, and an account management fee. For the County customers, County uses the water consumption data to calculate sewer fees for its residents on an annual basis in their real property tax bill.

Rates

The rates are approved by the Board of Estimates (BOE). The approved rates are set up in the billing systems by DPW IT Division and BCIT for City and County account billings, respectively. These rates are applied for customer billing in UMAX and the 3270 Systems.

Water Meters

For the City, there is fixed infrastructure called Automatic Meter Infrastructure (AMI) where repeaters and collectors are permanently affixed to structures (e.g., buildings, poles and fixtures) around the City. These wirelessly receive signals from the meter transmitter also known as encoder receiver transmitter (ERT) that record water meter consumption. These signals are sent to the repeaters and collectors and transmitted to a software system called Choice Connect that converts wireless reads into water consumption data in the City's UMAX for billing.

For the County, there is an Automatic Meter Reading system (AMR) where a meter technician drives a vehicle with a mobile collector that collects all the reads and uploads

the reads to the 3270 System for billing. The meters in the County also have ERTs, but the data must be collected by a radio device. The radio device will give a green light if the read for that address was successful, and a red light if not successful. If not successful, the driver will stop and determine the cause of the problem.

All reads, regardless of process, are automatic. If there are bad reads, usually about 100 out of 4,000 per cycle, the Meter Shop will go on site to perform manual reads and fix meters that are giving inaccurate readings. Effective July 2021, for the City accounts that received no meter readings, the Meter Shop began taking the following temporary initiative. After each cycle drop, DPW will identify which accounts did not record any readings. Similar to the meter reading process that the City uses for County accounts, the Meter Shop downloads the City accounts with no meter readings, then drives to the locations in the City for the purpose of troubleshooting misreads and developing problem patterns. The Meter Shop performs this to determine the root causes of the mis-readings: (1) if ERT is programmed incorrectly; (2) if there are any transmission issues between ERTs, and any other connectivity devices to prevent the readings to ultimately reach UMAX; and (3) if there are any issues with a cut or severed cable between the water meter and the ERT. If the issue is related to transmissions, the Meter Shop communicates this issue to Itron, which manages Choice Connect, to provide better coverage in those areas.

Billing and Customer Complaints

The DPW CSSD oversees the meter and billing systems for all City and County accounts. The CSSD Billing and Adjustments section bills approximately 200,000 City accounts on a monthly cycle and approximately 207,000 County accounts on a quarterly cycle.

The CSSD Billing and Adjustments section reviews reports from both the UMAX and 3270 Systems if there is an error associated with the AMI or AMR collected data, or if there is a billing-related customer complaint, to manually adjust the bill as needed. If there is a meter-specific issue, a work order is created in the Cityworks System, and a Meter Shop technician is dispatched to diagnose and correct the problem and manually take a meter reading. The manual read is then uploaded to the respective billing system to calculate a new water bill in the next billing cycle.

Collections

City and County customers can pay their water bill by mail, in-person at Bureau of Revenue Collections (BRC) in the Abel Wolman Building, or online. The Department of Finance (DOF) BRC collects and records water revenue in the City's accounting system. For FY 2020 and FY 2019, the City collected \$212 million and \$177 million, respectively. The billing information is not readily available to be included in this report.

Objectives, Scope, and Methodology

We conducted our performance audit in accordance with *Generally Accepted Government Auditing Standards*, except for peer review requirements. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The objectives of our audit were to:

- Assess whether the DPW policies and procedures adequately address water billing process risks; and
- Follow-up on prior findings and recommendations included in the previous Biennial Performance Audit Report, dated November 14, 2019.

The scope of our audit is FYs 2020 and 2019, and only included retail water; however, certain other matters, procedures, and transactions outside that period were reviewed to understand and verify the information during the audit period. Our review included the following six functions relevant to the water billing process: (1) setting BOE approved rates in DPW billing systems; (2) customer accounts set up; (3) meter reading; (4) billing; (5) customer complaints; and (6) collections.

To accomplish our objectives, we:

- Interviewed key individuals from DPW and BCIT to obtain an understanding of the processes, procedures, and systems relevant to audit objectives;
- Reviewed applicable policies and procedures and other relevant information associated with the City and County water billing process; and
- Evaluated relevant objectives, risks, and controls to confirm whether DPW has policies, procedures, and processes to reduce identified risks.

SECTION I: Current Findings and Recommendations

Finding 1: DPW Information Technology Division needs to document new rate setting and testing processes for continuity.

Although DPW IT Division has the rate setting processes and performs testing before execution of the new rates (see bullets below), these processes are not formally required and documented in policies and procedures or a manual.

- For City accounts in UMAX System, the DPW Chief Fiscal Officer receives the BOE approved rates. The DPW's UMAX administrator enters the new rates in the system with the yearly start and end date of the rates. The DPW IT Chief, along with another IT analyst, verifies that any new rates (approved by the BOE) have been entered into UMAX correctly. Before the actual bills are sent to the City customers, a sample of bills from the first billing cycle run are sent to Itineris (the UMAX vendor) to verify that UMAX is calculating the water bills correctly.
- For County accounts in the 3270 System, the DPW Chief Fiscal Officer receives the BOE-approved rates, and a BCIT employee enters the new rates in the 3270 System. The DPW CSSD verifies that any new rates approved by the BOE have been entered into the 3270 System correctly.

Formal policies and procedures promote compliance, accountability, consistency, and continuity. According to the *Standards of Internal Control in the Federal Government* issued by the Comptroller of the United States (Green Book), management:

- Implements control activities through policies;
- Documents in policies the internal control responsibilities of the organization; and
- Communicates to personnel the policies and procedures so that personnel can implement the control activities for their assigned responsibilities.

Recommendation I: We recommend the Director of DPW implement formal (written, approved, and dated) policies and procedures for the requirement of new rate setting and testing processes for the City and the County accounts.

Finding 2: DPW Meter Shop needs to develop policies and procedures for continuity.

The DPW Meter Shop does not have written policies and procedures for meter reading processes for City and County, although it has automated and systematic water meter reading processes (see Water Meters on page 3). Without formal policies and procedures, DPW cannot promote compliance, accountability, consistency, and continuity. According to DPW, the new management for Meter Shop is in the process of developing policies and procedures for the Meter Shop.

Also, the DPW Meter Shop does not replace water meters until they no longer function properly. As a result, there is an increased risk of meter reading inaccuracy, which ultimately results in potential financial loss for the City. Organizations such as the American Water and Wastewater Association (AWWA) establish standards for periodic meter calibration and water meter replacement. Currently, the Meter Shop does not follow any industry standards.

According to AWWA, “an effective metering program relies upon selecting and managing the proper metering technology and data collection for the customer's consumption patterns; including determining the proper size, type, and installation of meters and periodic accuracy testing, repair, maintenance and replacement of all meters. These practices ensure optimum accuracy at reasonable cost. Accurately recording all water consumption provides a basis for effective recovery of revenue and assessing users fairly and equitably for all services used, which encourages the efficient use of water.”

Recommendation II: We recommend the Director of DPW:

- Establish formal (written, approved, and dated) policies and procedures for water meter reading processes for the City and County accounts;
- Assess the value of proactive water meter calibration and replacement; and
- Establish and implement processes and controls for water meter calibration and replacement, then document those processes formally in policies and procedures if management decides to implement the second bullet.

Finding 3: DPW Customer Support Service Division processes to identify exceptional water usages and unbilled City accounts need to be formally documented.

Although DPW CSSD's current policies and procedures for water usage exceptions give guidance to customer service analysts on how to investigate exceptions when they are assigned (reactionary basis), these policies and procedures do not reflect the current management's practices of reviewing exceptions daily (proactive basis) for the City and County accounts.

Additionally, another initiative to safeguard that all accounts are billed has not been formally documented in the current policies and procedures for City accounts. Effective May 2021, the CSSD new management started reviewing for City accounts the 45-day exception report generated from UMAX. The report is run each morning, showing accounts not billed within the last 45 days to reach the goal of all accounts becoming billable.

Without formal policies and procedures, DPW cannot promote compliance, accountability, consistency, and continuity. According to DPW, the new management team is striving to improve water billing processes and is in the process of writing new policies and procedures. Constant changes in DPW's environment do not allow DPW to consistently update policies and procedures for water billing processes.

According to the Green Book, management:

- Implements control activities through policies;
- Documents in policies the internal control responsibilities of the organization; and
- Communicates to personnel the policies and procedures so that personnel can implement the control activities for their assigned responsibilities.

Recommendation III: We recommend the Director of DPW implement formal (written, approved, and dated) policies and procedures for daily reviews of exceptions for the City's accounts.

Finding 4: DPW Customer Support Service Division needs to improve policies, procedures, and practices for tracking and monitoring of customer billing complaints for both City and County accounts.

Although DPW has certain policies, procedures, and practices for processing customer billing complaints, DPW does not have policies, procedures, and practices for the following controls to reduce the risk of not solving billing customer complaints timely.

- **Periodic reviewing and revising the benchmarks of the Service Level Agreements** - The DPW's current benchmarks for the SLA are: (1) acknowledging customer billing complaints within 48 hours; and (2) resolving them within five business days. However, the history of how these benchmarks of the SLA were established is unknown. Customer billing complaints could have been attributed to water leakage, a broken water meter, broken pipes, etc., which may need more than five business days to resolve. As a result, an unreasonable benchmark of the SLA affects results of customer complaints.
- **Periodic systematic monitoring of customer billing complaints to be sure the current benchmarks of the Service Level Agreements are achieved** - According to DPW, they were monitoring City but not County customer billing complaints. Without monitoring the timeliness of resolving customer billing complaints, DPW cannot manage the operating effectiveness and adequacy of the workforce.

According to the Green Book, management:

- Establishes activities to monitor performance measures and indicators. These may include comparisons and assessments relating different sets of data to one another so that analyses of the relationships can be made, and appropriate actions taken. Management designs controls aimed at validating the propriety and integrity of both entity and individual performance measures and indicators;
- Implements control activities through policies;
- Documents in policies the internal control responsibilities of the organization;
- Communicates to personnel the policies and procedures so that personnel can implement the control activities for their assigned responsibilities; and
- Periodically reviews policies, procedures, and related control activities for continued relevance and effectiveness in achieving the entity's objectives or addressing related risks.

Recommendation IV: We recommend the Director of DPW:

- Establish and implement formal (written, approved, and dated) policies and procedures for tracking, monitoring, and periodic (e.g., annually, biennially, every three or five years) evaluation of the benchmarks of the SLA of the customer billing complaints for the City and the County accounts;
- Document: (1) the monitoring activities to demonstrate DPW is following the established policies and procedures; and (2) the change if the benchmarks of the SLA are modified; and
- Include the benchmarks of the SLA in the DPW systems to efficiently monitor customer billing complaints.

Finding V: The City does not take proactive measures to increase water revenue collections.

Currently, DPW generates a monthly aging accounts receivable AR report (based on criteria such as 30-60-90 days or more) for City accounts, showing which bills are outstanding. However, there are no processes to collect delinquent accounts for the City and the County accounts, which increases the risk of potential financial loss. Specifically, the City does not:

- Monitor aged AR for individual customer accounts, even though the report is generated monthly;
- Send separate late notices to customers for any overdue water bills;
- Establish timeframe (30/60/90 days) to send demand letters;
- Refer overdue accounts to the City's Department of Law or a collection agency to collect debt: and
- Write off uncollectable AR from individual accounts.³

All governments must have effective revenue collection strategies in place to ensure sufficient cash is available to pay operational costs. The Government Finance Officers Association (GFOA) recommends governments establish a revenue control and management policy and review it on an annual basis. The following are excerpts from the GFOA's recommended control and management policy over revenues.

- Billing and collection practices - Effort should be made to ensure that receivables are collected in a timely fashion. A policy should be established to provide for 'write-offs' of AR, including timeframe, dollar thresholds and decision-making authority.
- Accounts receivable management - All AR should be recorded in a manner that allows for aging analysis. **After reviewing available collection options, governments should establish procedures that maximize collections. Collection agencies that are familiar with federal, state, and local notice requirements and regulations should be considered when their use proves cost-effective.**
- Bad Debts - An allowance for doubtful accounts and a write-off policy should be established. Bad debt expense should be estimated based upon a documented method of calculation. An allowance for doubtful accounts should be recorded.

³ Uncollectable water billing AR is written-off annually as one amount adjustment to the published Annual Comprehensive Financial Reporting as required by *Generally Accepted Accounting Principles* (GAAP). No adjustments for uncollectible accounts are made in the water billing systems for City and County accounts leading to ever increasing balances.

Write-offs should be performed periodically to ensure that accounts receivable and allowance balances are not overstated. **Efforts should be made to pursue the timely collection of delinquent accounts.**

Recommendation V: We recommend the Director of DPW quantify amounts, customers, and months that water bills have not been paid or paid late and share these statistics with the City's leadership team to consider the ways to maximize revenue collection efficiency.

SECTION II: Implementation Status of Prior Audit Finding and Recommendation

Table I

Summary of Implementation Status of Audit Finding and Recommendation from the Performance Audit Report for Fiscal Years Ending June 30, 2018 and 2017 Service 661 - Public Right-of-Way Cleaning⁴

No.	Finding	Prior Recommendation	Management’s Self-reported Implementation Status	Auditor’s Assessment
1.	<p>The DPW did not maintain documentation to support compliance with their standard operating procedure. The City converted to Salesforce in November 2018 and the business requirements did not include a transfer of the photographs (key control). The photographs were placed on a disk that was stored in a format that cannot be viewed.</p> <p>The DPW standard operating procedure requires before and after photographs be taken to evidence the completion of the corresponding task(s).</p>	<p>Confirm that any modifications / replacements to DPW information technology systems include retention of historical documentation, especially for key controls.</p>	<p>Implemented.</p> <p>The issue in the previous audit was the City’s transition to a new software, Salesforce, for 311. The transition did not involve transferring the previous photos for dirty street and alley work. DPW still has the photographs, but they are not connected to a service request. For all service requests, DPW continues to follow its standard operating procedure of taking before and after photographs for service requests. The photographs include a small whiteboard on which the date and address of the property are written. These photographs are uploaded to Salesforce as evidence that the request had been closed. In the future, if the Baltimore City Office of Information Technology plans any future migrations or changes that would impact the storage of the past photos in the 311 system, DPW will discuss the impacts with them to try to ensure that no historic photo information is lost from the 311 system.</p>	<p>The implementation status was not assessed in this report, due to no new system migrations, and is deferred until the FYs 2022 and 2021 Biennial Performance Audit report when there may be a project migration to assess DPW’s key controls to mitigate loss of historical data. The DPW is working with BCIT on plans for any future migrations or changes that would impact the storage of the past photos in the 311 system. Since the last audit, there have been no migrations of DPW systems. The DPW has not provided any support of key controls in place to include retention of historical documentation for future system migrations. There are projects to prepare for and plan for the migration of data and information, but none have been completed.</p>

⁴ The selected performance measure is the percentage of alley cleaning service requested closed on time.

APPENDIX I

Management's Response to the Audit Report

Date: December 22, 2021

To: Josh Pasch, City Auditor

Subject: Management Response to Audit Report:
Biennial Performance Audit Report on Department of Public Works
for the Fiscal Years Ended June 30, 2020 and 2019

Our responses to the audit report findings and recommendations are as follows:

Recommendation I

We recommend the Director of DPW implement formal (written, approved, and dated) policies and procedures for the requirement of new rate setting and testing processes for the City and the County accounts.

Management Response/Corrective Action Plan

Agree **Disagree**

The Director of DPW, Jason Mitchell, convened a working group of internal employees as well as expert consultants to turnaround DPW's billing, metering, and customer service operations. The team meets daily and is assessing every facet of the billing, metering, and customer service processes to optimize efficiency. The team is working around the monthly billing cycles and is focused on ensuring every meter is reading, every account is billed accurately, and every customer receives adequate and acceptable customer service. Through this review, we anticipate being able to address the issues raised by this audit report.

Specifically, DPW will work to implement policies and procedures for the rate setting and testing processes for City and the County accounts. The Agency will monitor and document the steps taken to set and test rates based on existing informal processes, assess the process for adequacy according to the Green Book and other best practices, and create a formal procedure. The procedure will be distributed to all relevant personnel and kept centrally for continuity.

Implementation Date: December 31, 2022

Responsible Personnel:

- LaToya Curtis, Interim Chief, CSSD
- Yugandhar Narala, Chief, DPW IT
- Aaron Moore, Interim Chief, DPW Fiscal

Recommendation II

- Establish formal (written, approved, and dated) policies and procedures for water meter reading processes for the City and County accounts;
- Assess the value of proactive water meter calibration and replacement; and
- Establish and implement processes and controls for water meter calibration and replacement, then document those processes formally in policies and procedures if management decides to implement the second bullet.

Management Response/Corrective Action Plan

Agree **Disagree**

The Director of DPW, Jason Mitchell, convened a working group of internal employees as well as expert consultants to turnaround DPW's billing, metering, and customer service operations. The team meets daily and is assessing every facet of the billing, metering, and customer service processes to optimize efficiency. The team is working around the monthly billing cycles and is focused on ensuring every meter is reading, every account is billed accurately, and every customer receives adequate and acceptable customer service. Through this review, we anticipate being able to address the issues raised by this audit report.

Management acknowledges the value of formal policies and procedures to promote compliance, accountability, consistency, and continuity. The DPW is currently developing policies and procedures for the DPW Meter Shop as noted in the finding. The Agency, also as noted, has automated and systematic water meter reading processes. The Agency is a member of multiple national industry associations and routinely supports professional development opportunities for personnel. However, the Agency is also determined to maximize customer value, carefully balancing best practices, regulatory compliance, limited resources, and rate increases. The Office of Fiscal Management will work with the Meter Shop to conduct a survey of varying options for proactive meter calibration and replacement and cost-benefit analysis of those options in Summer 2022. Policies and procedures associated with the action will be finalized and / or updated as necessary.

As it relates to proactive maintenance of water metering, the Meter Shop and the Office of Fiscal Management will be conducting a cost-benefit analysis on proactive meter maintenance. There are, indeed, standards on water meter maintenance. That being said, DPW uses meters that are connected to equipment that transmits data remotely. Given the cost of update, programming, removing, and reinstalling a meter and its concomitant equipment and fittings, the overall cost to the Agency is proactively maintaining a meter may exceed that of simply replacing it.

Implementation Date: December 31, 2022

Responsible Personnel:

- Stephen Stricklin, Interim Chief, Meter Shop
- Aaron Moore, Interim Chief, DPW Fiscal

Recommendation III

We recommend the Director of DPW implement formal (written, approved, and dated) policies and procedures for daily reviews of exceptions for the City's accounts.

Management Response/Corrective Action Plan

Agree **Disagree**

The Director of DPW, Jason Mitchell, convened a working group of internal employees as well as expert consultants to turnaround DPW's billing, metering, and customer service operations. The team meets daily and is assessing every facet of the billing, metering, and customer service processes to optimize efficiency. The team is working around the monthly billing cycles and is focused on ensuring every meter is reading, every account is billed accurately, and every customer receives adequate and acceptable customer service. Through this review, we anticipate being able to address the issues raised by this audit report.

After an extended period of interim leadership and transition, DPW received new management in May 2021. Preliminary surveys and assessments of operations by management led to several new proactive initiatives. There is an expected lag in the production and execution of updates to policies based on development, testing, analysis, and final implementation of new procedures. Once completed, a written, approved, and dated policy will be produced to allow for the consistent application of policy. In the interim, however, management is requiring certain information be reviewed and approved ONLY by senior managers so as to maximize consistency.

Implementation Date: December 31, 2022

Responsible Personnel:

- LaToya Curtis, Interim Chief, CSSD
- Matthew Garbark, Deputy Director, DPW

Recommendation IV

- Establish and implement formal (written, approved, and dated) policies and procedures for tracking, monitoring, and periodic (e.g., annually, biennially, every three or five years) evaluation of the benchmarks of the SLA of the customer billing complaints for the City and the County accounts;
- Document: (1) the monitoring activities to demonstrate DPW is following the established policies and procedures; and (2) the change if the benchmarks of the SLA are modified; and
- Include the benchmarks of the SLA in the DPW systems to efficiently monitor customer billing complaints.

Management Response/Corrective Action Plan

Agree **Disagree**

The Director of DPW, Jason Mitchell, convened a working group of internal employees as well as expert consultants to turnaround DPW’s billing, metering, and customer service operations. The team meets daily and is assessing every facet of the billing, metering, and customer service processes to optimize efficiency. The team is working around the monthly billing cycles and is focused on ensuring every meter is reading, every account is billed accurately, and every customer receives adequate and acceptable customer service. Through this review, we anticipate being able to address the issues raised by this audit report.

Management at DPW does agree that “DPW Customer Support Service Division needs to improve policies, procedures, and practices for tracking and monitoring of customer billing complaints for both City and County accounts.” To this end, Management concurs that we need to “establish and implement formal (written, approved, and dated) policies and procedures.”

The updating and managing of SLAs for customer complaints will be a difficult process, as is noted. The numbers DPW uses are generalized benchmarks for customer service inquiries. They are not necessarily based on the specific inquiries DPW receives. As is noted, some complaints are resolved immediately and some require a much longer period of time.

Through the Turnaround Initiative, DPW management believes billing and customer service staff must first work towards a consistent and coordinated process in addressing inquiries. Only after such a process is established can DPW begin to evaluate SLAs and hold employees accountable.

Implementation Date: December 31, 2022

Responsible Personnel:

- LaToya Curtis, Interim Chief, CSSD
- Matthew Garbark, Deputy Director, DPW

Recommendation V

We recommend the Director of DPW quantify amounts, customers, and months that water bills have not been paid or paid late and share these statistics with the City's leadership team to consider the ways to maximize revenue collection efficiency.

Management Response/Corrective Action Plan

Agree **Disagree**

The DPW operates a multi-jurisdictional and public utility. Great care is taken to balance revenue management practices with the oversight and restrictions that accompany that status. Therefore, it is generally correct to characterize the City's efforts as not being proactive in increasing utility revenue collections. Limited passive tools were used to collect delinquent accounts such as a delinquency charge, termination procedure for delinquent balances, and liens.

Revenue collection tools were limited in use by several factors out of the Agency's control including legal restrictions and the COVID-19 public health emergency. First, the Agency cannot act unilaterally and must work in partnership with the DOF on these endeavors, which facilitates the collection of all revenue on behalf of the City. The City has had a self-imposed moratorium on sending owner-occupied property to tax sale solely due to unpaid water and sewer bills since FY 2018. This resulted in the removal of approximately 403 owner-occupied residential properties from its annual tax sale in FY 2019, which represented a total value of approximately \$4.2 million in liens not sold and revenue lost. In addition, Maryland General Assembly passed Senate Bill 96 during the 2019 Legislative Session. This law required the City to withhold from tax sale any residential property or certain tax-exempt religious property if the obligations on the property consist only of a lien for unpaid charges for water and sewer service effective May 2020. As a result, balances are only able to be collected in these instances where there is a transfer of real property. Moreover, in March 2020, the Mayor of Baltimore and Baltimore County Executive issued executive orders that neither jurisdiction would turn off water service for

failure to pay during the State of Emergency related to the COVID-19 public health emergency.

Agency leadership continually monitors revenue and holds discussions internally about revenue collection practices. Current collection practices have not had a material impact on the financial condition of any of the utility funds.

In May 2021, DPW received new leadership. Management acknowledges and places a strong value on revenue collection practices with formal policies and procedures. The Agency has already begun several new proactive initiatives and is developing new initiatives to analyze billing data to maximize revenue collection efficiency.

Implementation Date: December 31, 2023

Action Plans:

- Action Milestone 1: Analyze delinquent accounts - June 30, 2022
- Action Milestone 2: Review available collection options - September 30, 2022
- Action Milestone 3: Conduct an analysis of available collection options for cost-efficiency - June 30, 2023
- Action Milestone 4: Establish procedures that maximize collections - December 31, 2021

Responsible Personnel:

- Aaron Moore, Interim Chief, DPW Fiscal
- Matthew Garbark, Deputy Director, DPW