REPORT ON INTERNAL CONTROL AND ON COMPLIANCE AND OTHER MATTERS CITY OF PHILADELPHIA Fiscal Year 2017





City Controller Rebecca Rhynhart



CITY OF PHILADELPHIA

OFFICE OF THE CONTROLLER 1230 Municipal Services Building 1401 John F. Kennedy Boulevard Philadelphia, PA 19102-1679 (215) 686-6680 FAX (215) 686-3832 REBECCA RHYNHART City Controller

CHRISTY BRADY Deputy City Controller

June 12, 2018

Honorable James F. Kenney, Mayor City of Philadelphia 215 City Hall Philadelphia, PA 19107

Dear Mayor Kenney:

Attached is the Office of the Controller's report on internal control and on compliance and other matters for fiscal year 2017.

While our office found that the city's fiscal year 2017 financial statements released February 23, 2018 were presented fairly, in all material respects, in accordance with generally accepted accounting principles, the audit procedures used to arrive at this conclusion identified two material weaknesses and eight significant deficiencies in the city's internal control over financial reporting.

Inadequate financial reporting oversight and ongoing staffing shortages led to errors totaling \$923.7 million not detected by the Finance Office. Also, there were weak cash controls in the Treasurer's Office, including not reconciling the city's consolidated cash account, as well as other accounts. Non-reconciliation of the consolidated cash account, which was noted in the current and previous two internal control reports, led to a \$33.3 million variance between the city's book and bank balances. These findings are significant and deeply concerning, and they require action and urgency from the administration.

Our office recommends several changes to the processes in place to improve the internal control over financial reporting. The findings and recommendations contained in the report were discussed with management at an exit conference, and we included management's written response to the findings and recommendations as part of the report.

We would like to express our thanks to the management and staff of the City of Philadelphia for their courtesy and cooperation in the conduct of our audit. I respectfully call on you, Mayor Kenney, to prioritize the improvement of financial management procedures before these conditions become unmanageable.

Respectfully submitted,

REBECCA RHYNHART

City Controller

cc: Honorable Darrell L. Clarke, President and Honorable Members of City Council Rob Dubow, Director of Finance and other Members of the Mayor's Cabinet



CITY OF PHILADELPHIA FISCAL YEAR 2017 REPORT ON INTERNAL CONTROL AND ON COMPLIANCE AND OTHER MATTERS EXECUTIVE SUMMARY

Why The Controller's Office Conducted the Audit

In accordance with the Philadelphia Home Rule Charter, the Office of the City Controller audited the City of Philadelphia's (city) basic financial statements as of and for the fiscal year ended June 30, 2017, issued as part of the city's Comprehensive Annual Financial Report (CAFR). To help plan and perform the audit, which occurs annually, the Controller's Office reviews the city's internal control over financial reporting and examines the city's compliance with certain provisions of laws, regulations, contracts, and grant agreements to identify any noncompliance that could have a direct and material effect on financial statement amounts.

The Controller's Office reports upon any identified significant deficiencies and material weaknesses in the city's internal controls. Significant deficiencies are less severe than material weaknesses, yet important enough to merit attention by those charged with governance. Material weaknesses identified in financial reporting result in a reasonable possibility that a material misstatement of the city's financial statements may not be prevented or detected and corrected on a timely basis. If a material misstatement on the city's financial statements occurred, the statements would be an ineffective tool for assessing the city's financial health.

FY17 Report Findings

While the Controller's Office found that the city's financial statements were presented fairly, in all material respects, our review led our office to identify two material weaknesses and eight significant deficiencies in the city's internal controls. Moreover, many of the city's material weaknesses and significant deficiencies have gone unremedied for years.

The fiscal year 2017 report on internal control and on compliance and other matters discusses the weaknesses and deficiencies identified in depth. Key findings include:

- Weaknesses in the Treasurer's Office bank reconciliation process created the potential for significant errors and irregularities. Specifically, the Treasurer's Office did not properly reconcile the city's primary depository account, called the consolidated cash account, during fiscal years 2015 through 2017. As a result, a variance of \$33.3 million (as of June 30, 2017) between the account's book and bank balance was identified. Not reconciling accounts creates the possibility of significant errors or fraud going undetected. Issues with the reconciliation of city accounts by the Treasurer's Office have been cited in the last four reports, including this fiscal year's report. Additionally, several other accounts were noted as not reconciled in this report, some stemming back as far as September 2010. While the Treasurer's Office has begun reconciling the consolidated cash account, it has still not established a written policy for the process;
- Inadequate staffing levels, lack of technological investment, and insufficient oversight have led to undetected material misstatements. This finding has been cited in each of the last 11 internal control reports. The Controller's Office identified accounting errors totaling \$923.7 million not detected by Finance Office accountants in preparation of the fiscal year 2017 CAFR. Since fiscal year 2000, the number of Finance Office accountants has decreased by nearly 27 percent. Ongoing staff shortages and recent turnover in the accounting division of Finance have compromised the ability of Finance management

(Continued on next page)

to perform adequate reviews of the financial statements. Additionally, the Finance Office operates without comprehensive financial reporting systems for preparing the CAFR and capital asset management, instead using a combination of files from Excel, Word, and LOTUS 1-2-3 (a program discontinued and unsupported since 2014); and

• Lax monitoring of adjustments to tax accounts may lead to undetected errors or irregularities. On any given day, Revenue Department staff can make adjustments to taxpayer accounts totaling millions of dollars. These adjustments are not being reviewed by Revenue Department accountants. Additionally, numerous Revenue Department employees have the ability to post payment and receivable adjustments directly to taxpayer accounts on Revenue's Taxpayer Inquiry and Payment System (TIPS), the department's computerized accounting system. While employees could only perform adjustments up to an authorized dollar amount, the effectiveness of this control is reduced by the very high dollar amounts - we observed dollar limits as high as \$1 million for non-supervisory personnel and \$100 million for supervisory personnel. Although no instances of improper or inaccurate activity were found, taxpayer accounts are at a higher risk for undetected errors and irregularities due to the adjustment process currently in place. Consequently, there is an increased risk for lost revenue and misstatement of the taxes receivable reported in the city's CAFR.

What The Controller's Office Recommends

The Controller's Office has developed a number of recommendations to address the above findings. Some of the more significant recommendations are noted below.

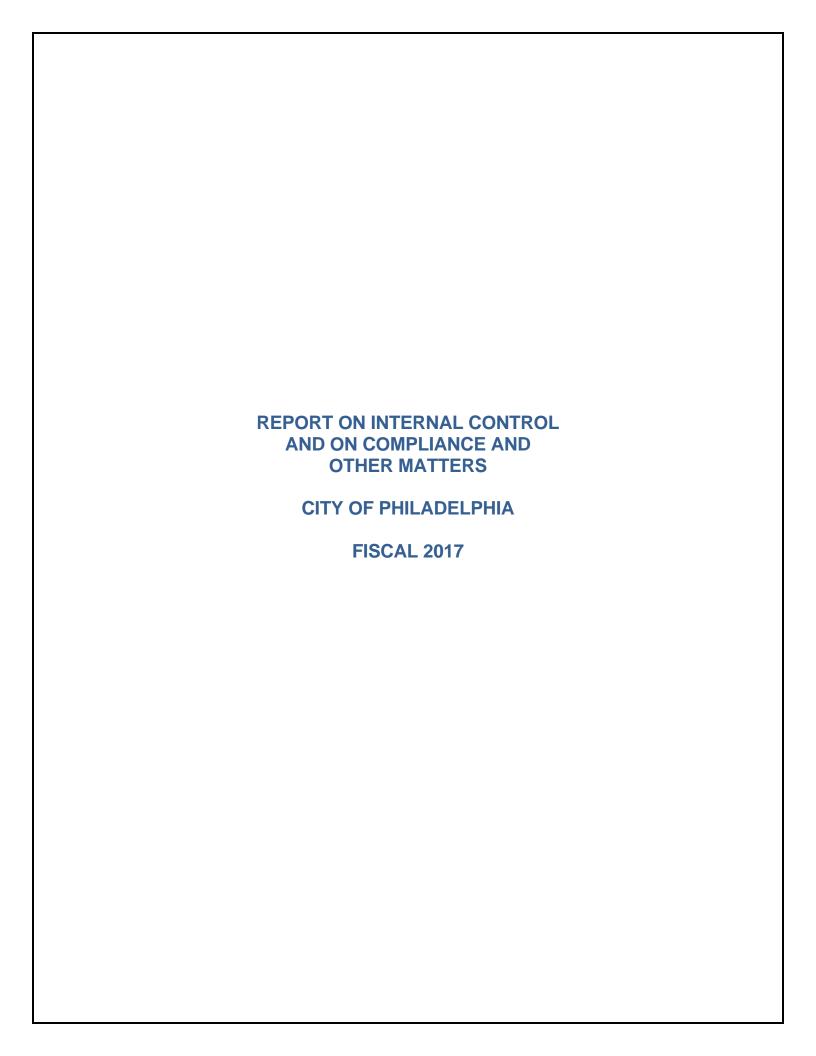
To address the weaknesses in its bank reconciliation process, the Finance Office and Treasurer's Office management should:

- Devote the necessary resources to perform a proper, complete and timely reconciliation of the consolidated cash account, and all bank reconciliations should be brought up to date, working together to investigate reconciling items.
- Move forward with the plan to use an outside firm to investigate the \$33.3 million unknown variance. Given the variance's significance and the possibility of undetected fraud, it is essential that management establish a timeframe for the investigation's completion.
- Formalize the reconciliation procedures for the consolidated cash account in writing to ensure that they are consistently performed and documented.

To improve controls over the preparation and review of the city's CAFR, Finance Office management should either hire more accountants, or invest in a new financial reporting system that will reduce the labor-intensive procedures needed to prepare the city's CAFR. Also, management should provide adequate training for new hires and employees performing new duties. Lastly, Finance Office management should secure the necessary resources to design or purchase a computerized capital asset management system.

To address the lax monitoring of adjustments made to taxpayer accounts, Revenue Department management should require that independent supervisory personnel review the daily adjustment reports for patterns of irregular activity, test samples, and document the review.

Additional specific recommendations developed by the Controller's Office can be found in the body of this report.





CITY OF PHILADELPHIA

OFFICE OF THE CONTROLLER 1230 Municipal Services Building 1401 John F. Kennedy Boulevard Philadelphia, PA 19102-1679 (215) 686-6680 FAX (215) 686-3832 REBECCA RHYNHART
City Controller
CHRISTY BRADY
Deputy City Controller

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the Honorable Mayor and Honorable Members of the Council of the City of Philadelphia

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the City of Philadelphia, Pennsylvania, as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the City of Philadelphia, Pennsylvania's basic financial statements, and have issued our report thereon dated February 23, 2018. Our report on the basic financial statements includes an emphasis-of-matter paragraph describing a change, discussed in Notes I.1.B. and III.14.B.(2) to the basic financial statements, in the financial reporting entity. Our report also includes a reference to other auditors. Other auditors audited the financial statements of the following entities, as described in our report on the City of Philadelphia, Pennsylvania's financial statements.

Primary Government
Municipal Pension Fund
Philadelphia Gas Works Retirement Reserve Fund
Parks and Recreation Departmental and Permanent Funds
Philadelphia Municipal Authority
Pennsylvania Intergovernmental Cooperation Authority

Component Units
Community College of Philadelphia
Philadelphia Parking Authority
Philadelphia Redevelopment Authority
Community Behavioral Health
Philadelphia Authority for Industrial Development

C I T Y O F P H I L A D E L P H I A OFFICE OF THE CONTROLLER

Component Units (Continued)
Philadelphia Gas Works
Philadelphia Housing Authority

This report does not include the results of the other auditors' testing of internal control over financial reporting or compliance and other matters that are reported on separately by those auditors. The financial statements of the Philadelphia Parking Authority were not audited in accordance with *Government Auditing Standards*. Also, the reported amounts for the Philadelphia Housing Authority (PHA) include PHA's discretely presented component units whose financial statements, except for St. Ignatius Senior Housing I, L.P., St. Ignatius Senior Housing II, L.P., St. Francis Villa Senior Housing, L.P., and 1952 Allegheny Associates, L.P., were not audited in accordance with *Government Auditing Standards*.

We have also audited the basic financial statements of the School District of Philadelphia, a component unit of the City of Philadelphia, in accordance with *Government Auditing Standards* and issued a separate report on the School District's internal control over financial reporting and on compliance and other matters.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the City of Philadelphia, Pennsylvania's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City of Philadelphia, Pennsylvania's internal control. Accordingly, we do not express an opinion on the effectiveness of the City of Philadelphia, Pennsylvania's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. However, as described in the accompanying report, we identified certain deficiencies in internal control that we consider to be material weaknesses and significant deficiencies.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. We consider the deficiencies described in the accompanying report as items 2017-001 and 2017-002 to be material weaknesses.

A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies described in the accompanying report as items 2017-003 to 2017-010 to be significant deficiencies.

C I T Y O F P H I L A D E L P H I A OFFICE OF THE CONTROLLER

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the City of Philadelphia, Pennsylvania's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed an instance of noncompliance or other matter that is required to be reported under *Government Auditing Standards* and which is described in the accompanying report as item 2017-011.

Other Conditions

We noted certain other conditions that represent deficiencies in internal control described in the accompanying report as items 2017-012 to 2017-015. Also, during our annual examination of the financial affairs of city departments, we identified other internal control and compliance deficiencies which will be communicated to management in a separate report.

City of Philadelphia, Pennsylvania's Response to Findings

The City of Philadelphia, Pennsylvania's written response to the findings identified in our audit is included as part of this report. The City of Philadelphia, Pennsylvania's written response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

CHRISTY BRADY, CPA

Christy Brady

Deputy City Controller Philadelphia, Pennsylvania

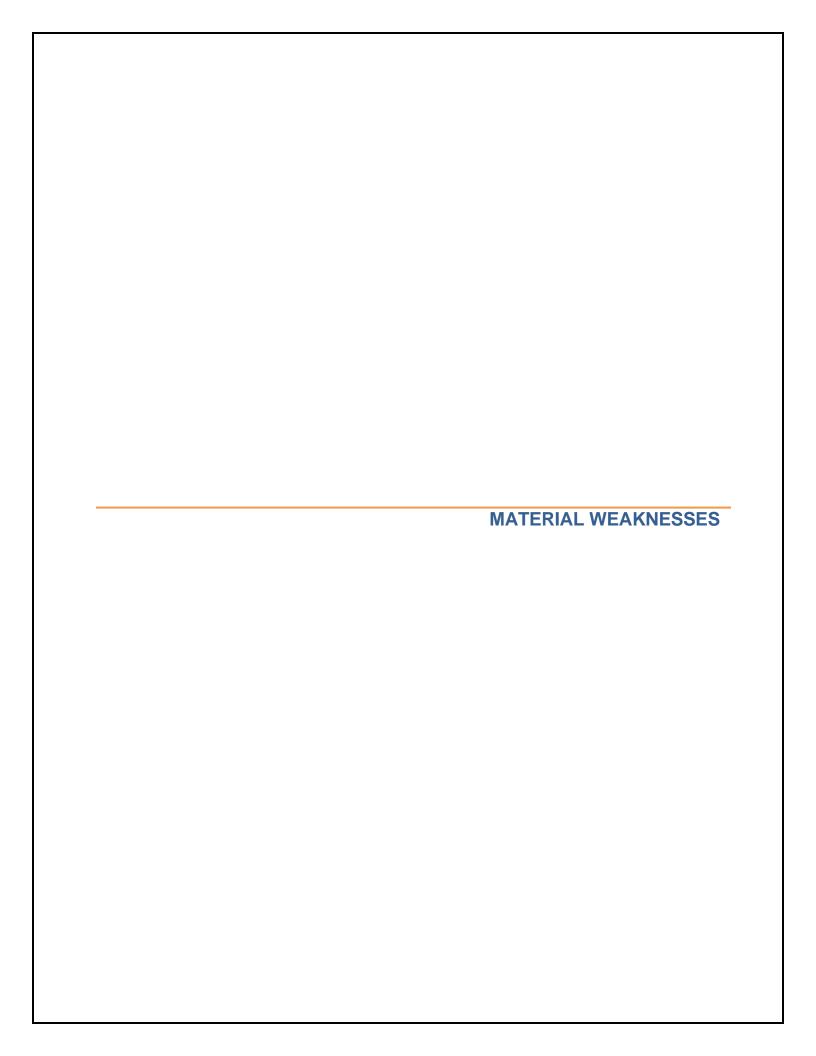
February 23, 2018

CONTENTS

MATERIAL	WEAKNESSES	<u>Page</u>
2017-001	Inadequate Staffing Levels, Lack of Technological Investment and Insufficient Oversight Led to Undetected Material Misstatements	1 2
2017-002	Weaknesses in Treasurer's Cash Controls Create Potential for Significant Errors and Irregularities	5
SIGNIFICA	NT DEFICIENCIES	
2017-003 2017-004	Payment Vouchers Approved Without Required Management Authorization	
2017-005 2017-006	Increases Risk for Improprieties	12 13 . 13
2017-007	Accounting Records Failure to Timely Transfer Funds Between City Bank Accounts Could Result in Significant Reporting Errors	
2017-008	Lax Monitoring of Adjustments to Tax Accounts May Lead to Undetected Errors or Irregularities	
2017-009	SAPs Require Updating to Ensure Accurate and Consistent Application of Accounting Rules and Regulations	17
2017-010	General Information Technology Controls Require Strengthening	18
REPORTA	BLE INSTANCE OF NONCOMPLIANCE	
2017-011	Noncompliance with Act 148 Grant Reporting Deadlines Delayed Receipt of Funds	20
OTHER CO	ONDITIONS	
2017-012 2017-013 2017-014 2017-015	Better Oversight Is Still Necessary to Ensure Accurate Grant Reporting	23 25

CORRECTIVE ACTIONS TAKEN BY MANAGEMENT

Water Department's Financial Statement Review Procedures Improved	
APPENDICES	
Appendix I: Remediation Status of Prior Year Findings for General Controls Review of OIT	28
Appendix II: Remediation Status of Prior Year Findings for Airport's PROPworks System	
RESPONSE TO AUDITOR'S REPORT	
Rob Dubow, Director of Finance	36
AUDITOR'S COMMENTS ON AGENCY RESPONSE	54



2017-001 INADEQUATE STAFFING LEVELS, LACK OF TECHNOLOGICAL INVESTMENT AND INSUFFICIENT OVERSIGHT LED TO UNDETECTED MATERIAL MISSTATEMENTS

Philadelphia's Home Rule Charter places responsibility for the City of Philadelphia's (city) accounting and financial reporting functions with the Office of the Director of Finance (Finance Office). In that capacity, the Finance Office prepares the city's Comprehensive Annual Financial Report (CAFR). To complete these tasks, Finance Office accountants collect, analyze, and summarize enormous amounts of financial and grant-related data, as well as other information obtained from the city's accounting system (FAMIS¹), numerous city agencies, and assorted quasi-government units, such as the Philadelphia Gas Works and the Philadelphia Redevelopment Authority.² Our current audit again disclosed a number of conditions, which collectively we consider to be a material weakness, that impede the ability of accountants to prepare a timely, accurate, and completed CAFR without significant adjustments recommended by the City Controller's audit staff. More specifically, we observed that:

- Staff reductions and turnover in the Finance Office, as well as a lack of a comprehensive financial reporting system, have compromised the accurate preparation of the CAFR;
- Failure to use the full accrual Aviation and Water Funds established in FAMIS to post year-end journal entries resulted in significant financial statement errors; and
- Late submission of financial reports for some component units hampered preparation of the CAFR.

Each of these conditions is discussed in more detail below.

Staff Shortages and Turnover Along with Lack of a Comprehensive Financial Reporting System Have Contributed to Significant Financial Statement Errors

Condition: Errors totaling \$923.7 million were not detected by Finance Office accountants during preparation of the city's fiscal year 2017 CAFR.

Criteria: Financial statements should be prepared to communicate relevant and reliable information. Accordingly, the statements should be free of all errors that might affect a reader's ability to make confident and informed decisions.

Effect: Because Finance Office accountants agreed with and corrected most of the errors we identified, the city's publicly issued fiscal year 2017 CAFR can be relied upon for informative decision making.

Cause: Ongoing inadequate staffing and employee turnover in recent years, along with the lack of a comprehensive financial reporting system, have hindered the ability of the Finance Office to produce an accurate draft of the CAFR for audit. More specifically:

 $^{^{1}}$ $\underline{\mathbf{F}}$ inancial $\underline{\mathbf{A}}$ ccounting and $\underline{\mathbf{M}}$ anagement $\underline{\mathbf{I}}$ nformation $\underline{\mathbf{S}}$ ystem

² These quasi-government units are considered component units for purposes of the city's CAFR.

- The Finance Office has continued to operate with a reduced staff size. Since fiscal year 2000, the number of Finance Office accountants has declined by nearly 27 percent (from 64 full-time employees in fiscal year 2000 to 47 in fiscal year 2017). The Finance Office accounting division has also experienced considerable staff turnover since January 2016, with several new hires and various individuals promoted to supervisory and managerial positions. Inadequate staff size, combined with several employees still learning their duties, made the task of completing the CAFR more difficult and compromised the ability of Finance Office management to perform adequate reviews of the financial statements and related financial disclosures. Examples of errors that were not detected by Finance Office management include (1) \$338.6 million of misstatements in budgeted amounts reported on the budgetary comparison schedules, (2) \$127.7 million of misclassification errors between revenue categories on the Aviation Fund financial statements, and (3) a \$97.7 million overstatement of the governmental activities' net position restricted for capital projects because the financial statements presented for audit contained the prior year balance for this account.
- Accountants in the Finance Office lacked a comprehensive financial reporting system to prepare the CAFR. Instead, accountants produce the CAFR using numerous Excel, Lotus 1-2-3 (a program that has been discontinued and unsupported since 2014), and Word files with various links between the files. Using multiple linked files creates a cumbersome process which can adversely affect the accuracy and completeness of the CAFR.

Recommendations: Without sufficient and experienced accounting staff and a comprehensive financial reporting system to prepare and review information needed for the CAFR, the risk increases that significant errors can occur and not be timely discovered and corrected. We continue to recommend that Finance Office management either hire more accountants, or invest in a new comprehensive financial reporting system that will reduce the current labor-intensive procedures needed to prepare the city's CAFR [50107.01]. Additionally, we continue to recommend that management provide adequate training for new hires and employees performing new duties [500116.01].

In response to last year's report, Finance Office management stated they planned to engage an accounting firm to help them compile the fiscal 2017 CAFR; however, this plan was not implemented. Our current year discussions with Finance Office management disclosed they have hired an accounting firm and plan to use them to assist with the preparation and review of the fiscal year 2018 CAFR, including the completion of a compilation package with detailed documentation supporting the financial statements. While we support the Finance Office's hiring of an accounting firm as a short-term remedy to improve the CAFR preparation and review process, we believe the appropriate long-term solution is to either hire more accountants or invest in a new comprehensive financial reporting system, as recommended above.

FAMIS Not Utilized for Posting Enterprise Funds' Year-End Journal Entries

Condition: As previously reported, accountants in the Finance Office, the Philadelphia Water Department (PWD), and the Division of Aviation (DOA) were still not utilizing the full accrual Water and Aviation Funds established in FAMIS to post year-end adjusting journal entries to prepare the

financial statements. While the full accrual Water Fund has never been used, accountants have not updated the full accrual Aviation Fund since fiscal year 2014.

Criteria: The Finance Office, PWD, and DOA should be using the full accrual Water and Aviation Funds in FAMIS to post adjusting entries so as to provide a clear trail of adjustments between the modified and full accrual statements and decrease the risk of errors in the CAFR.

Effect: There is an increased risk of error in compiling the city's CAFR. For example, because the full accrual Aviation Fund in FAMIS reflects fiscal year 2014 amounts, the DOA accountants had to prepare additional journal entries to record the correct beginning balances in compiling the Aviation Fund financial statements. Our testing of the compilation supporting the fiscal year 2017 Aviation Fund financial statements found two instances where an account's beginning balance was not recorded, resulting in errors totaling \$13.7 million – a \$12.2 million overstatement of accounts receivable and revenues and a \$1.5 million understatement of deferred inflows of resources related to pensions.

Cause: Finance Office accountants indicated that the staff shortages and turnover they experienced in recent years, as well as other more urgent priorities, precluded them from working with the PWD and DOA to utilize the full accrual Water and Aviation Funds in FAMIS.

Recommendations: In order to decrease the risk of financial statement error, we continue to recommend that Finance Office management:

- Require that PWD accountants utilize the FAMIS full accrual Water Fund to post its year-end accrual adjustments [500114.02].
- Work with the DOA to ensure that the FAMIS full accrual Aviation Fund is brought up to date [500116.06].

Late Receipt of Component Unit Financial Reports Still Delayed Preparation and Audit of CAFR

Condition: As we have reported for the last several years, late receipt of component unit financial reports continued to delay preparation and audit of the city's CAFR. As shown in Table 1 below, eight of the city's ten component units still did not submit their final reports by the due dates requested by Finance Office accountants.

The greatest challenge to the timely completion of the CAFR came from the School District of Philadelphia, the Philadelphia Housing Authority (PHA), and the Philadelphia Redevelopment Authority.³ These three agencies submitted their reports very late (February 16, 2018, February 9, 2018, and February 2, 2018, respectively), leaving the Finance Office accountants and the Controller's Office auditors little time to ensure that they were accurately included in the city's CAFR before it was issued on February 23, 2018.

³ While the Philadelphia Municipal Authority's (PMA's) final report was submitted 115 days late, it did not present as significant a reporting problem as some of the other late component units because PMA had submitted a draft report to the city in September 2017, early enough to be included in the first draft of the CAFR.

Table 1: Late Submission of Component Unit Financial Reports					
COMPONENT UNIT	<u>Due</u> <u>Date</u>	<u>Date</u> <u>Received</u>	DAYS LATE		
Community Behavioral Health	9/30/2017	10/18/2017	18		
Pennsylvania Intergovernmental Cooperation Authority	9/30/2017	10/18/2017	18		
Philadelphia Gas Works	11/30/2017	1/25/2018	56		
Philadelphia Housing Authority	11/30/2017	2/9/2018	71		
Philadelphia Municipal Authority	9/30/2017	1/23/2018	115		
Philadelphia Parking Authority	9/30/2017	10/11/2017	11		
Philadelphia Redevelopment Authority	9/30/2017	2/2/2018	125		
School District of Philadelphia	9/30/2017	2/16/2018	139		

Note: Community College of Philadelphia and Philadelphia Authority for Industrial Development submitted their financial reports timely.

Source: Prepared by the Office of the City Controller

Criteria: An essential element of timely financial reporting is that it promotes management accountability and communicates information early enough to allow users of the financial statements to make informed decisions.

Effect: Failure to receive component unit financial statements on time increases the risk for errors or omissions, as the amount of time becomes limited for Finance Office accountants to adequately review the reports. The risk of error also increases as accountants must make significant changes to multiple financial statements and footnote disclosures each time a component unit's financial information is added to the report. Additionally, each series of changes requires considerable audit time to ensure that accountants have correctly changed previous amounts and footnotes presented for audit. During the current year audit, we identified and the Finance Office corrected misclassification errors relating to the component units totaling \$12.6 million.

Cause: There is no incentive for component units to submit their final financial statements timely to the city and no consequences for those who do not meet the required deadline. The late submission of the PHA's financial report was due to the Finance Office not timely determining that PHA met the criteria for inclusion as a component unit and not requesting the PHA's financial statements until November 13, 2017.

Recommendations: We again recommend that, early in the CAFR preparation process, Finance Office accountants solicit the assistance of the mayor and/or other administrative officials to secure the cooperation of all component units' management in the timely submission of their respective final financial reports to the city's Finance Office [50102.01]. We also recommend that the Finance Office strive to more timely complete its evaluation of potential component units and its requests for financial statements for those entities determined to be component units [500117.01].

2017-002 WEAKNESSES IN TREASURER'S CASH CONTROLS CREATE POTENTIAL FOR SIGNIFICANT ERRORS AND IRREGULARITIES

Section 6-300 of the Philadelphia Home Rule Charter designates the City Treasurer as the official custodian of all city funds, and thereby charges the Office of the City Treasurer (Treasurer) with the responsibility for establishing controls to safeguard these assets and ensure the accuracy of reported cash balances. Our audit continued to disclose deficiencies in the Treasurer's bank reconciliation procedures for the city's primary depository account (i.e. consolidated cash account) where, as was the case for the entire fiscal year 2016, differences between book and bank activity were not readily identified or investigated for the first eleven months of fiscal year 2017. Also, we again noted that the Treasurer had not reconciled six of its accounts for several years, the most notable being the city's payroll and general disbursement accounts which had not been reconciled since September 2010 and January 2012, respectively. These deficiencies in the Treasurer's controls over its cash accounts, which collectively we consider to be a material weakness, increased the risk for significant undetected errors in these accounts and potentially invited fraud to occur without discovery. Each of these conditions is discussed in more detail below.

Treasurer's Failure to Properly Reconcile the Consolidated Cash Account Creates Possibility of Significant Undetected Errors and Improprieties

Condition: According to its accounting records, the city collected approximately \$9.9 billion in cash receipts during fiscal year 2017. With collections of such significant value, conducting a proper reconciliation of accounting records to bank statements which identifies discrepancies for subsequent investigation is essential to safeguard cash and detect errors and irregularities in the daily recording of receipts. For the first eleven months of fiscal year 2017, our testing continued to note the following deficiencies in the Treasurer's reconciliation procedures for its consolidated cash account:

- The Treasurer's reconciliation of the consolidated cash account was incomplete. Specifically, the reconciliation did not include a comprehensive list that readily identified each of the reconciling items making up the difference between the book and bank balance, which would assist the Treasurer and Finance Office in determining whether all receipts were deposited and all transactions recorded. Instead, Treasurer accountants only provided us with a large, complex spreadsheet that attempted to compare the account's receipt and disbursement transactions per the city's accounting system (FAMIS) to bank activity. However, this spreadsheet presented variances without further explanation or investigation and failed to account for all transactions.
- Also, as noted in our last two reports, the Treasurer's bank reconciliation process included neither (1) a comparison of all reported receipt amounts on the Revenue Department's daily report of city collections, also known as the Consolidated Summary of Deposits (CSD), to amounts deposited in the consolidated cash account nor (2) a subsequent investigation of differences between reported collections and bank deposits. This deficiency was evidenced by the results of our comparison of the CSD to city bank account statements for 24 selected dates where we found \$5,666,306 in reported collections for which Treasurer accountants could not provide a record of the monies ever being deposited.

Starting with the June 2017 activity, with the assistance of the Finance Office's accounting assistant director and a consultant, the Treasurer began reconciling the consolidated cash account's daily FAMIS activity to bank transactions, including a comparison of the CSD's reported collection amounts to bank deposits and the preparation of a list of reconciling items making up the difference between the book and bank balance. Also, Treasurer management informed us that, beginning with the July 2017 reconciliation, they send a monthly list of consolidated cash account reconciling items to related city departments requesting their assistance with investigating these items. However, the Treasurer had not yet formalized in writing these newly implemented reconciliation procedures.

The Treasurer continued the reconciliation of daily account activity in fiscal year 2018 and provided us with bank reconciliations for the months of July 2017 through November 2017 as of the end of our fieldwork in February 2018. Beginning with the July 2017 reconciliation, the Treasurer prepared the consolidated cash account bank reconciliation using the format prescribed by Standard Accounting Procedure (SAP) No. 7.1.3.b, *Reconciliation of All Bank Accounts in All City Agencies*. However, the reconciliations provided to us were not signed by the preparer and contained no evidence of supervisory review.

While the Treasurer started reconciling the consolidated cash account activity from June 2017 forward, Treasurer management acknowledged that there is a significant unknown variance between the account's book and bank balance for activity prior to June 2017. The Treasurer's July 2017 reconciliation initially reported this unknown variance to be \$40.1 million, where the consolidated cash account's book activity exceeded the bank activity by that amount. In subsequent months, the Treasurer identified \$6.8 million of this discrepancy, bringing the unknown variance down to \$33.3 million as of February 2018. In April 2018, the Treasurer hired an outside accounting firm to assist them with investigating the remaining unknown variance.

Criteria: SAP No. 7.1.3.b requires that monthly reconciliations of city bank accounts readily identify all of the specific transactions comprising the difference between the book and bank balance to allow city agencies to investigate these reconciling items and determine whether they represent errors or irregularities. To ensure the accuracy of the city's reported revenue receipts and cash balances and reduce the risk of fraud, the Treasurer's reconciliation process should include a comparison of all daily collections reported on the CSD to amounts deposited into the city's bank accounts and timely investigation of any differences noted. Also, SAP No. 7.1.3.b requires that bank reconciliations are signed and dated by the preparer and reviewed by a responsible supervisory employee, who should sign and date the reconciliations to provide evidence and affix responsibility for performance of this task.

Effect: Due to the Treasurer's failure to properly reconcile the consolidated cash account's activity prior to June 2017 and the resulting \$33.3 million unknown variance, there is the possibility that significant errors and fraud in this account may have gone undetected.

Cause: Prior to June 2017, Treasurer management had not made it a priority to allocate the necessary resources to ensure that (1) the consolidated cash account was properly reconciled in accordance with SAP No. 7.1.3.b and (2) there was a comparison of all daily collections reported on the CSD to bank deposit amounts and timely investigation of differences. Also, we previously commented that there had been an apparent lack of communication and coordination between the Treasurer and Revenue Department to ensure

that Treasurer's accounting staff had an adequate understanding of the reported collection amounts on the CSD, their related responsibilities when performing the comparisons, and the necessary steps to resolve any identified differences.

In January 2017, to assist with the matching of the CSD's reported collections to bank deposits, the Treasurer and Revenue Department instituted a procedure requiring city departments to submit proof of deposit (e.g. validated bank deposit slip or bank statement) before the Revenue Department will record the department's revenue transaction. While Treasurer management asserted that this new procedure has made it easier to compare CSD reported collections to bank deposits, they informed us the procedure did not resolve ongoing problems with reconciling revenue activity for the Department of Public Health (DPH). The DPH has a separate bank account from which amounts are automatically transferred daily to the consolidated cash account, but these transfers often do not match recorded revenue. For example, the Treasurer's June 2017 consolidated cash account bank reconciliation showed a \$4.2 million variance between DPH recorded collections and actual transfers into the consolidated cash account.

Recommendations: To ensure that the city's consolidated cash account is adequately safeguarded and reported cash and revenue amounts are accurate, we recommend Treasurer management:

- Continue to devote the necessary resources to perform a proper, complete, and timely reconciliation of the consolidated cash account, which should include (1) a comparison of the CSD's reported collections to bank deposits and (2) the preparation of a comprehensive list of the specific reconciling items making up the difference between the book and bank balance. The Treasurer should work with the Finance Office in investigating reconciling items to determine whether they represent errors in reported cash and/or revenue. Also, the Treasurer should continue its practice of sending the monthly list of reconciling items to city departments for their assistance with investigating the items. Any errors identified should be corrected accordingly [500116.03].
- Ensure that all consolidated cash bank reconciliations are signed and dated by the preparer. Supervisory personnel should review the bank reconciliations, including the comparison of the CSD's reported collections to bank deposits, and evidence their review by signing and dating the reconciliations [500117.02].
- Formalize the reconciliation procedures for the consolidated cash account in writing to ensure that they are consistently performed and documented [500117.03].
- Continue to work with Revenue Department management in resolving problems noted when
 performing the comparison of the CSD's reported collections to bank deposits. In particular,
 Treasurer and Revenue Department management should work together to resolve the ongoing
 problems in reconciling DPH revenue activity [500115.06].
- Move forward with using the outside accounting firm to investigate the \$33.3 million unknown variance related to consolidated cash account activity prior to June 2017. Any errors or improprieties discovered by this investigation should be addressed accordingly. Also, given the significance of the

unknown variance and the possibility of undetected fraud, it is essential that management formally establish a time frame for the investigation's completion [500117.04].

Treasurer's Failure to Reconcile Certain Accounts for Years Increases the Risk for Irregularities

Condition: While there was improvement noted in the timeliness of the Treasurer's bank reconciliations as compared to the prior year,⁴ we continued to find that the Treasurer had not reconciled six accounts for several years, as detailed in Table 2 below.

Table 2: Bank Accounts Not Reconciled by Treasurer's Office			
Name of Bank Account	Month Last Reconciled		
Payroll Account †	September 2010		
Supplemental Payroll Account †	September 2010		
General Disbursement Account	January 2012		
Levy Account	June 2014		
Pension Payroll Account	July 2014		
Pension Payroll Deduction Account	December 2015		

[†] The city's Payroll and Supplemental Payroll Accounts at Wells Fargo Bank have not been reconciled since September 2010. The city discontinued using these accounts for the city's payroll disbursements at the end of fiscal year 2017 and opened new accounts at Citizens Bank for fiscal year 2018.

Source: Prepared by the Office of the Controller based upon reconciliation information provided by the Treasurer's Office

A resulting condition from the Treasurer's failure to reconcile these accounts for several years is noncompliance with Pennsylvania's Disposition of Abandoned and Unclaimed Property Act (escheat act). As of March 2018, the city had \$1.6 million of unclaimed payroll checks from calendar years 2010 through 2015 and \$4.9 million of unclaimed general disbursement account (i.e. vendor) checks from calendar years 2012 through 2014 that should be escheated to the state.

Criteria: Effective internal control, as well as the city's SAP No. 7.1.3.b, require that book balances for city cash accounts be reconciled to the bank balances on a monthly basis. SAP No. 4.1.2, titled *Unclaimed Monies*, instructs city departments to remit all checks outstanding for over one year to the city's Unclaimed Monies Fund, which is administered by the Finance Office who is then responsible for remitting amounts to the state in accordance with the escheat act. The Pennsylvania escheat act requires that property which remains unclaimed by the owner for a specified dormancy period (depending on property type) be remitted to the Pennsylvania Treasury. The dormancy period is two years for unclaimed wages/payroll and three years for all other unclaimed property types.

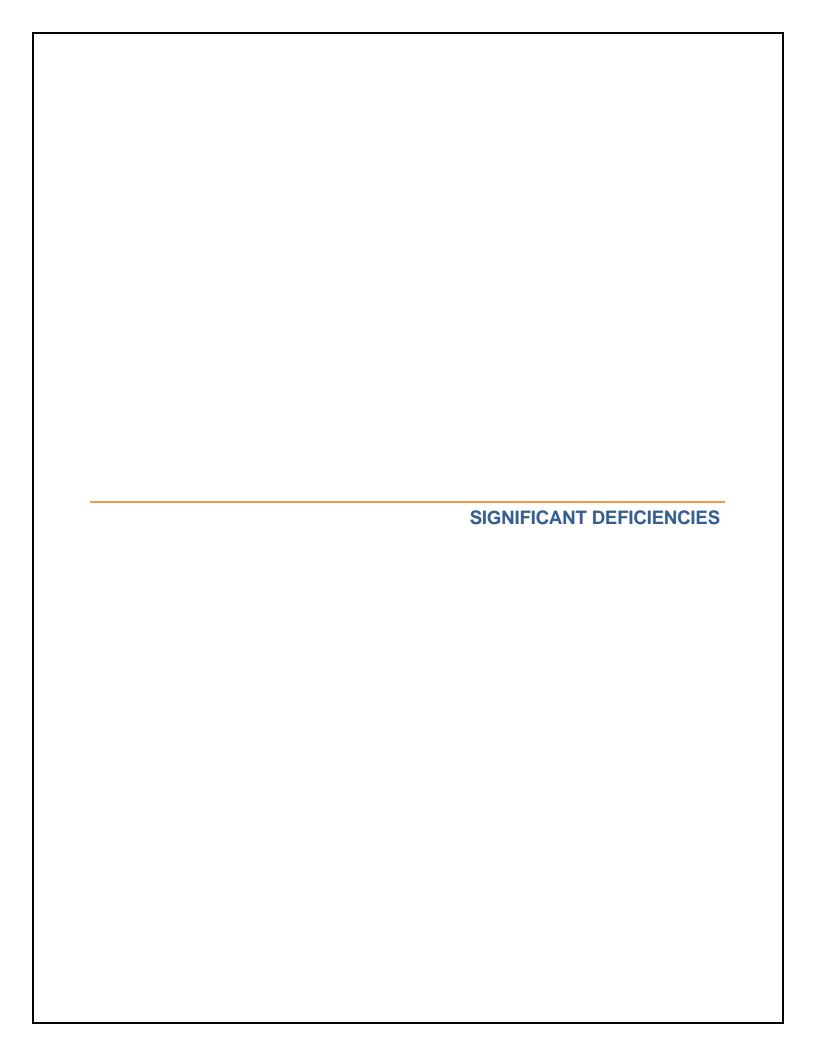
⁴ The prior audit noted that, out of 75 Treasurer bank accounts, 51 accounts were reconciled less than two months after June 30th, 17 accounts were reconciled more than two months after June 30th, and seven accounts were not reconciled at all. During the current audit, out of 77 Treasurer bank accounts, 69 accounts were reconciled less than two months after June 30th, two accounts were reconciled more than two months after June 30th, and six accounts were not reconciled at all.

Effect: The city is at an increased risk for undetected errors in reported cash balances and/or irregularities in account activity. Noncompliance with the Pennsylvania escheat act may subject the city to penalties.

Cause: This continuing condition suggests that Treasurer management has not made the completion of the required bank reconciliation process a priority or allocated the necessary resources to perform this function effectively.

Recommendations: We continue to recommend that Treasurer management devote the necessary time and resources to ensure that all required bank reconciliations are timely prepared on a monthly basis. Bank reconciliations for any unreconciled accounts must be brought up-to-date. Management should consider hiring an outside accounting firm to assist in this effort [500114.06].

In addition, Treasurer and Finance Office management should work together to ensure that all escheatable amounts are sent to the Pennsylvania Treasury. In the future, the Treasurer should comply with SAP No. 4.1.2 in remitting all checks outstanding over one year to the city's Unclaimed Monies Fund, and the Finance Office should send all unclaimed monies due to the Pennsylvania Treasury in accordance with the state escheat act [500117.05].



2017-003 PAYMENT VOUCHERS APPROVED WITHOUT REQUIRED MANAGEMENT AUTHORIZATION

Condition: The Finance Office approved payment vouchers without the required management level of authorization. Our review of fiscal year 2017 expenditures approved by the Finance Office for payment vouchers exceeding \$500,000 disclosed 61 vouchers totaling \$211 million that were not authorized by the department head or their properly authorized deputy. Table 3 below provides a breakdown of these vouchers by department.

Table 3: Payment Vouchers Approved Without Required Management Authorization			
Department	# of Vouchers	Dollar Amount of Vouchers	
Office of the Managing Director	1	\$1,079,350	
Department of Public Health	37	186,872,438	
Philadelphia Prison System	6	6,708,698	
Office of the Director of Finance	5	4,612,648	
Division of Aviation	12	11,715,603	
Totals for All Departments	<u>61</u>	<u>\$210,988,737</u>	

Source: Prepared by the Office of the Controller from review of fiscal 2017 payment voucher information extracted from the city's FAMIS and ADPICS⁵ systems

Criteria: The city's SAP No. E-0911, *Signature Authorization Cards*, requires that a payment voucher exceeding \$500,000 be approved by the department's commissioner, director, board chairman, or their properly authorized deputy.

Effect: While our sample testing of fiscal year 2017 expenditures did not reveal any irregularities, failure to verify the proper management authorization prior to approving payment vouchers increases the risk that unauthorized expenditures may be approved and not be detected in a timely manner.

Cause: The Finance Office's Financial Verification Unit, which has responsibility for approving payment vouchers, did not always ensure that, prior to approving payment vouchers exceeding \$500,000, the vouchers had the required level of departmental approval.

Recommendation: To reduce the risk of unauthorized expenditures, we recommend that the Finance Office's Financial Verification Unit only approve payment vouchers above the \$500,000 limit when there is proper departmental approval [500117.06]. Finance Office management has indicated that approval requirements have been reviewed and reinforced with Financial Verification Unit staff.

-

⁵ <u>Ad</u>vanced <u>Purchasing Inventory Control System</u>

2017-004 ALLOWING UNAUTHORIZED INDIVIDUALS TO APPROVE BI-WEEKLY PAYROLLS INCREASES RISK FOR IMPROPRIETIES

Condition: As reported over the last several years, we again noted instances where unauthorized employees approved the city's bi-weekly payrolls during fiscal year 2017. The official payroll signature files maintained by the Finance Office were not always consistent with the approval privileges assigned within the city's online payroll system. The city's on-line payroll process consists of the following three steps: data entry of payroll transactions, supervisory review, and executive approval. Our comparison of the payroll signature files for 57 city departments to individuals authorized in the on-line payroll system to perform the executive-level approvals revealed:

- Six departments (11 percent) had employees designated in the payroll system as authorized executive-level approvers who were not listed as such on the official payroll signature cards. For four of these six departments, we noted a total of 36 pay periods in fiscal year 2017 where the executive-level approval was performed by an employee not listed on the department's approved signature card. Two departments, the Atwater Kent Museum and the Mayor's Office of Labor Relations, accounted for 24 of the 36 pay periods where payroll was approved by an unauthorized employee. While Finance Office management provided a signature card for the Atwater Kent Museum which listed the employees in question, the card did not contain the required approvals of the department head, the Finance Office, and the City Controller's Office.
- Thirty-nine departments (68 percent) had employees who were authorized as executive-level
 approvers, but not designated as such in the payroll system. Eighty-seven of these employees did
 not have access to the system, but many of them were department heads and deputies who usually
 delegated this responsibility to other department officials in financial or personnel management
 positions.

Criteria: To reduce the risk of irregularities, effective internal control procedures dictate that only individuals who are properly authorized should approve the bi-weekly payrolls. Additionally, signature authorization records should be appropriately updated as required by the city's SAP No. E-0911 titled *Signature Authorization Cards*. This SAP requires the Finance Office to maintain a current signature file of employees authorized to enter executive-level approvals for their respective department's payroll.

Effect: For four of 57 city departments, unauthorized employees approved approximately \$6.3 million in payroll costs during fiscal year 2017. Although we found no improprieties, the city has exposed itself to a higher level of risk for such occurrences.

Cause: The Finance Office has instituted a procedure where, for each payroll period, Central Payroll Unit personnel compares a report listing department managers who perform the executive-level approvals in the on-line payroll system to the signature card files and investigates any discrepancies. However, the Finance Office's control procedures did not always timely identify instances of discrepancies between the signature authorization cards and executive-level approval privileges assigned within the on-line payroll system.

Also, management has not yet updated SAP No. E-0911 to reflect the current control procedures and documentation requirements for payroll approvals.

Recommendations: We recommend that Finance Office management:

- Continue to compare the list of executive-level approvers in the on-line payroll system to the signature authorization cards to ensure that all individuals are properly authorized and have appropriate on-line access to the system [500113.13].
- Send responsible personnel periodic notices throughout the year regarding signature card requirements [500117.07].
- Revise SAP No. E-0911 accordingly to reflect the current control procedures and documentation requirements for payroll approvals [500115.01].

2017-005 FAILURE TO SEGREGATE PAYROLL DUTIES COULD ALLOW FRAUD TO OCCUR

Condition: During fiscal year 2017, the duties concerning the data entry, review, and approval of bi-weekly payroll transactions were again not adequately segregated. Our testing of 57 city departments for 26 pay periods revealed 342 occasions (23 percent), in which the same individual posted and approved the on-line payroll time records, applied both the supervisory and executive-level approvals, or performed all three duties. Employees in 28 departments performed duplicate functions for more than two pay periods, with the Mayor's Office, the Police Department, the Fire Department, the Board of Pensions and Retirement, and the Office of the Chief Administrative Officer being the most recurrent among the larger departments. While there had been some improvement in this condition when compared to the previous year's findings,⁶ a significant number of city departments were still not adequately segregating payroll duties.

Criteria: Effective internal control procedures require that payroll data entry, supervisory review, and executive-level approvals be performed by separate, authorized employees.

Effect: Failure to segregate duties and the combination of multilevel reviews increase the risk of undetected errors. Also, this situation provides opportunities for a person to perpetrate and conceal irregularities during the bi-weekly payroll preparation process, which may result in fraudulent payroll payments.

Cause: The city's current automated payroll system allows individuals with supervisory and executive-level approval authority to perform the work at their level, as well as the levels below them. Finance Office management asserted this system feature was intentional to ensure that payroll is processed in emergency situations that may occur when authorized individuals at all levels are not available to sign off on payroll. While the Finance Office sends annual reminders to city departments instructing them to segregate these payroll functions, many city departments do not always follow this directive. Also, the director of payroll informed us that, for several departments where employees performed duplicate functions, there was no

⁶ The prior year's testing disclosed 374 occasions during fiscal year 2016 (26 percent) in which these payroll functions were not separated. Also, we noted that, for 31 of 56 departments, employees performed duplicate functions for more than two pay periods.

individual assigned payroll data entry and/or supervisory level review privileges in the city's on-line payroll system.

Recommendation: We again recommend that the city's Finance Office continue to remind city departments of the importance of maintaining adequate segregation of duties for completing data entry, reviewing, and approving payroll each pay period. Finance Office management should identify the individual city departments who repeatedly fail to adequately segregate payroll duties and also periodically review the assigned privileges in the on-line payroll system to identify departments that do not have different individuals designated for all three payroll functions. Management should then send notices to the heads of these departments requesting that they ensure payroll duties are segregated each pay period and different employees are assigned to all three payroll functions. In response to this finding, Finance Office management started sending out such notices in March 2018. Lastly, since the city is in the process of implementing a new payroll system with a planned go-live date in December 2018, we recommend the Finance Office ensure that the new system is designed to limit the ability of one individual to perform two or more conflicting duties to a set number of occurrences. This control feature would incentivize department heads to ensure there are sufficient authorized, alternative employees to process payroll in emergency situations [500111.08].

2017-006 CAPITAL ASSET CONTROL DEFICIENCIES INCREASE RISK OF REPORTING ERRORS

As previously reported during the last several audits, controls over capital assets are deficient because (1) the city does not have a comprehensive capital asset system to facilitate accounting and reporting of these assets and (2) periodic physical inventories of the assets are not performed. Each of these conditions is discussed in more detail below.

Lack of a Comprehensive Capital Asset System Hampered Reporting Process

Condition: The city still lacks a comprehensive capital asset management system to better manage and account for real property assets. Instead, Finance Office accountants continue to maintain a cumbersome series of Lotus 1-2-3 and Excel files, that together with FAMIS, constitute the current fixed asset ledger. Various spreadsheet files accumulate the cost of capital assets and work in progress, while other spreadsheet files are used to calculate depreciation expense and accumulated depreciation reported in the city's CAFR. Real property addresses are only available in FAMIS by user code, which is identified in an Excel file called the "Proof".

Criteria: Philadelphia's Home Rule Charter⁷ requires management to maintain current and comprehensive records of all real property belonging to the city.

Effect: The use of multiple files creates a burdensome and onerous process that can affect the accuracy and completeness of capital asset amounts reported in the CAFR and causes extensive audit effort. For example, our current year testing found a \$15 million understatement of accumulated depreciation caused by a formula error in the spreadsheet file used to calculate depreciation. Also, we continued to find discrepancies between the "Proof" file and FAMIS – an \$8.5 million discrepancy in the accumulated

-

⁷ The Philadelphia Home Rule Charter, Section 6-501

depreciation balance for buildings, a \$1.6 million difference in the accumulated depreciation balance for other improvements, and a \$1.0 million variance between vehicle categories.

Cause: While Finance Office management agrees that it would be beneficial to have a comprehensive capital asset system, resources have not been identified to initially fund and continually maintain it.

Recommendation: To improve the accounting and reporting of the city's capital assets, we continue to recommend that Finance Office management secure the necessary resources to design or purchase a computerized capital asset management system that will provide accurate and useful information such as the book value and related depreciation for each city owned asset [50104.01].

Failure to Inventory Real Property Assets Increases Risk of Inaccurate Accounting Records

Condition: Except for the PWD and the DOA, which both periodically check the physical existence and condition of their real property assets, this year's audit again disclosed no evidence that the city's other real property assets had been recently inventoried. Also, while we previously recommended that the Finance Office compare the Philadelphia City Planning Commission's master database of city-owned facilities to the city's fixed asset ledger to identify any discrepancies, the Finance Office had not yet performed this comparison.

Criteria: SAP No. E-7201, *Real Property Perpetual Inventory*, specifies that the Procurement Department shall physically inspect all city-owned real property on a cyclical basis and check against the inventory listing to determine actual existence, condition and propriety of use. Additionally, the Government Finance Officers Association (GFOA) recommends that governments periodically inventory tangible capital assets, so that all assets are accounted for, at least on a test basis, no less often than once every five years. It also recommends governments periodically inventory the physical condition of all existing capital assets so that the listing of all assets and their condition is kept current. Furthermore, the GFOA recommends that a "plain language" report on the condition of the government's capital assets be prepared, and that this report be made available to elected officials and the general public at least every one to three years.

Effect: Continued failure to perform a physical inventory increases the risk that the city's recorded real property assets could be inaccurate and/or incomplete.

Cause: This issue has not been a priority for city management. The Finance Office, Procurement Department, and Department of Public Property (Public Property) – the agency responsible for acquiring and maintaining the city's real property assets – have not developed a coordinated process for physically inventorying all city-owned real property.

Recommendations: We continue to recommend that Finance Office management:

- Work with the Procurement Department and Public Property to periodically take physical inventories of all real property assets, ascertain their condition and use, and ensure that related records are timely and appropriately updated to reflect the results of this effort [50106.04].
- Develop and provide a plain language report on the condition of capital assets for the use of elected officials at least every one to three years. This report should also be made available to the general public [500109.02].
- Obtain the master list of city-owned facilities and compare it to Finance's records to identify any discrepancies and ensure the completion and accuracy of Finance's records [500113.14].

2017-007 FAILURE TO TIMELY TRANSFER FUNDS BETWEEN CITY BANK ACCOUNTS COULD RESULT IN SIGNIFICANT REPORTING ERRORS

Condition: Reported cash and investment amounts in the city's CAFR – specifically those reported under the account entitled Equity in Treasurer's Account – were at an increased risk for significant misstatement because the Finance Office's accountants frequently failed to timely transfer monies between city bank accounts to match activity recorded on the city's accounting system (FAMIS), which is the source of CAFR amounts.

All cash and investments in the bank accounts under the control of the Treasurer are reported under the Equity in Treasurer's Account, which represents each fund's share in the Treasurer's group of bank accounts. While many funds are members of the consolidated cash bank account, which pools monies to maximize the city's investment earnings, the city must also maintain separate bank accounts for certain funds such as the Water and Aviation Funds to comply with legal requirements (e.g. bond covenants and ordinances). Therefore, when there is activity in FAMIS that necessitates moving funds between the consolidated cash account and another city account, such as the transfer of expenditures from consolidated cash member funds to the Water or Aviation Funds, Finance Office accountants must prepare a cash transfer authorization (CTA) to authorize the Treasurer to move the funds.

Our current testing found that Finance Office accountants did not timely prepare CTAs for \$10.3 million of pending transfers due from the Water and Aviation Fund bank accounts to the consolidated cash account. These pending transfers were mostly related to transfers of expenditures from consolidated cash member funds to the Water and Aviation Funds that occurred in fiscal 2017 with one expenditure transfer dating as far back as June 2016. However, Finance Office accountants did not prepare the CTAs to authorize the \$10.3 million of transfers until February 2018, at the request of the Controller's Office. We observed that the Treasurer transferred the \$10.3 million from the Water and Aviation Fund bank accounts to the consolidated cash account in February 2018.

Criteria: The city's SAP No. I-4295, titled *Consolidated Cash Account*, requires that general ledger records are maintained setting forth the details of the daily transactions pertaining to the consolidated cash account and the member or non-member funds to which they apply. These records should reflect, on a daily basis, each member fund's equity balance of the consolidated cash account total and the amounts due from, or to, non-member funds. In addition, SAP No. 7.1.3.b, *Reconciliation of All Bank Accounts in All City Agencies*,

requires that Finance Office accountants reconcile the funds' Equity in Treasurer's Account balances per FAMIS to Treasurer account book balances. Effective internal control demands that such a reconciliation be performed at least monthly. As part of this reconciliation, Finance Office accountants should determine if transfers between bank accounts are necessary and then prepare CTAs accordingly. For reported Equity in Treasurer's Account balances to be accurate, the FAMIS transactions comprising these account balances must be supported by actual bank activity.

Effect: As a result of this condition, there is an increased risk for significant undetected errors in the Equity in Treasurer's Account amounts reported in the city's CAFR. Also, if required transfers are not performed timely for funds that are legally mandated to maintain separate bank accounts, the city is at a greater risk for noncompliance with the applicable legal requirements and possible resulting penalties.

Cause: Finance Office management had not developed procedures to ensure that the reconciliation of FAMIS Equity in Treasurer's Account amounts to Treasurer account balances and the preparation of necessary CTAs were timely performed. Finance Office accountants were behind in reconciling the consolidated cash member funds' equity amounts to Treasurer account balances, failing to perform this function for five months during fiscal year 2017. Finance Office management attributed these reconciling delays to staff turnover and the training needed by the new employee performing this function.

Recommendation: To minimize the risk of undetected errors in reported Equity in Treasurer's Account balances, we recommend that Finance Office management ensure that the employee responsible for reconciling consolidated cash member funds' equity amounts to Treasurer account balances receives adequate training. Finance Office management should also develop procedures designed to ensure that the reconciliation is performed monthly and required CTAs are promptly prepared and submitted to the Treasurer. The Treasurer should immediately perform the requested transfers [500117.08].

2017-008 LAX MONITORING OF ADJUSTMENTS TO TAX ACCOUNTS MAY LEAD TO UNDETECTED ERRORS OR IRREGULARITIES

Condition: Previously, we reported that Revenue Department accountants did not perform timely reviews of adjustments made to taxpayer accounts, which on any given day can involve millions of dollars. Accountants did not review fiscal year 2016 adjustments until January 2017, and the review was very limited in scope. Our current audit found that accountants had not performed any reviews of fiscal year 2017 adjustment transactions. Also, our discussions with Revenue Department management indicated that, as of February 2018, there had been no reviews of fiscal year 2018 adjustments.

Numerous Revenue Department employees have the ability to post payment and receivable adjustments directly to taxpayer accounts on Revenue's Taxpayer Inquiry and Payment System (TIPS). TIPS is the department's computerized accounting system, which is the source for taxes receivable reported in the CAFR. Examples of payment adjustments include transferring payments within a taxpayer's account (i.e. between tax years and/or tax types), transferring payments from one taxpayer account to another, changing the dollar amount of a payment, and creating a new payment on the system. Receivable adjustments involve increasing, decreasing, or entirely deleting a taxpayer's liability. While employees only had the ability to perform adjustments up to an authorized dollar limit and supervisory approval was required for adjustments

exceeding the established limits, the effectiveness of these system security controls was lessened by the fact that employees could have very high dollar limits. For instance, we observed dollar limits as high as \$1 million for non-supervisory personnel and \$100 million for supervisory personnel.

Criteria: To ensure that adjustments made to taxpayer accounts are accurate and proper, there should be a regular review of daily payment and receivable adjustment activity in TIPS by an independent supervisor.

Effect: Although our tests of selected TIPS adjustments disclosed no instances of inaccurate or improper activity, taxpayer accounts are at a higher risk for undetected errors and irregularities. Consequently, there is an increased risk for lost revenue and misstatement of the taxes receivable reported in the city's CAFR.

Cause: During fiscal year 2017, the employees assigned the duty of reviewing TIPS adjustments were transferred from the unit responsible for monitoring adjustments (Financial Reporting Unit (FRU)) to another Revenue Department unit. Revenue Department management informed us that, when these employees were transferred, the adjustment review was not reassigned to other employees because of staff shortages and other department priorities. Management has indicated that they plan to reinstitute the adjustment review once they obtain additional accounting staff. In February 2018, Revenue Department management hired an accounting manager for the FRU and stated that they plan to add an accountant in the coming months.

Recommendation: We continue to recommend that Revenue Department management reinstitute the practice of regularly monitoring daily payment and receivable adjustment activity in TIPS. Supervisory personnel independent of the adjustment process should review the daily adjustment reports for patterns of irregular activity and test a sample of adjustments for accuracy and propriety. To evidence that these checks are performed, the supervisor should sign and date the adjustment reports upon completion of the reviews [500115.07].

2017-009 SAPs REQUIRE UPDATING TO ENSURE ACCURATE AND CONSISTENT APPLICATION OF ACCOUNTING RULES AND REGULATIONS

Condition: The city's SAPs, which serve as the basis for the city's system of internal control, continue to be long outdated and fail to reflect the automated processes and practices currently in use. The Finance Office has established over two hundred SAPs to provide city departments and agencies with guidance on how to handle various accounting related activities, including proper procedures for ensuring the accuracy of transactions and the safeguarding of assets. Over the years, as new technologies were adopted and daily practices were enhanced, the existing SAPs have not been updated accordingly. While the Finance Office has updated eight SAPs since September 2015 – the most recent being the SAP pertaining to subrecipient monitoring in August 2017 – over 50 percent of the existing SAPs are more than half a century old.

Criteria: In accordance with Philadelphia's Home Rule Charter, the city's Finance Office is required to establish, maintain and supervise an adequate and modern accounting system to safeguard city finances.⁸ Also, in its best practices publication, the GFOA recommends that governments perform an on-going review, evaluation, and update of accounting procedures to ensure they remain technically accurate, understandable, and compliant with current rules and regulations.

-

⁸The Philadelphia Home Rule Charter, Section 6-101.

Effect: With the majority of SAPs not reflecting the automated processes and practices currently in use, there is an increased risk that critical control activities may be inconsistently applied or not performed at all, which could result in accounting errors and/or misappropriation of assets.

Cause: Over the years, the Finance Office experienced staff reductions that have compromised its ability to conduct periodic reviews and updates to the SAPs.

Recommendation: We continue to recommend that Finance Office management commit the resources necessary to perform a thorough review of its SAPs. Procedures no longer pertinent should be rescinded, and those that are out-of-date should be revised to reflect the automated processes and practices in use today. Once this initial update is completed, the Finance Office should develop a schedule for periodically updating SAPs on a regular basis in the future [50102.16].

During fiscal year 2018, the Finance Office hired a consultant to assist in reviewing and updating the SAPs. We commend Finance Office management for this initiative and urge them to follow through with the planned review and update of SAPs.

2017-010 GENERAL INFORMATION TECHNOLOGY CONTROLS REQUIRE STRENGTHENING

Condition: The prior audit's review of the Office of Innovation and Technology's (OIT's) general information technology (IT) controls over key financial-related applications⁹ revealed several significant weaknesses.¹⁰ In response to our previous year comment, we observed that, for the two employees who had development and systems administrator access rights to three applications (Pension Payroll, Health and Welfare, and TIPS), OIT management removed their development rights to these applications, thereby resolving that condition [300416.02]. However, our current testing continued to note the following deficiencies:

- OIT's established change management procedures were still not consistently followed. Our testing of twelve requests for changes to the city's IT systems, from the period of July 2016 through October 2017, found that six requests were not supported by documented end-user testing, and three change requests had no backout plan specifying the processes required to restore the system to its original state in the event of failed or aborted implementation. Also, for two change requests where there was no clear evidence of management approval, OIT personnel told us that the approval was implied because the change request was initiated by a manager. Lastly, while the change management policy now included more detail on required approvals for the different change types, it did not specifically address how end-user testing should be documented.
- Three programmers with access rights to the Payroll system had the ability to enter payroll

⁹ The key financial-related applications included in the review were FAMIS, ADPICS, Payroll, Pension Payroll, Health and Welfare, TIPS, and BASIS2.

¹⁰ The prior review also disclosed other findings with lesser impact. The remediation status of those other findings is discussed on page 25 and Appendix I of this report.

transactions and approve departments' bi-weekly payrolls.

 OIT's setup process for new users did not include a procedure to formally document new user access requests and approvals.

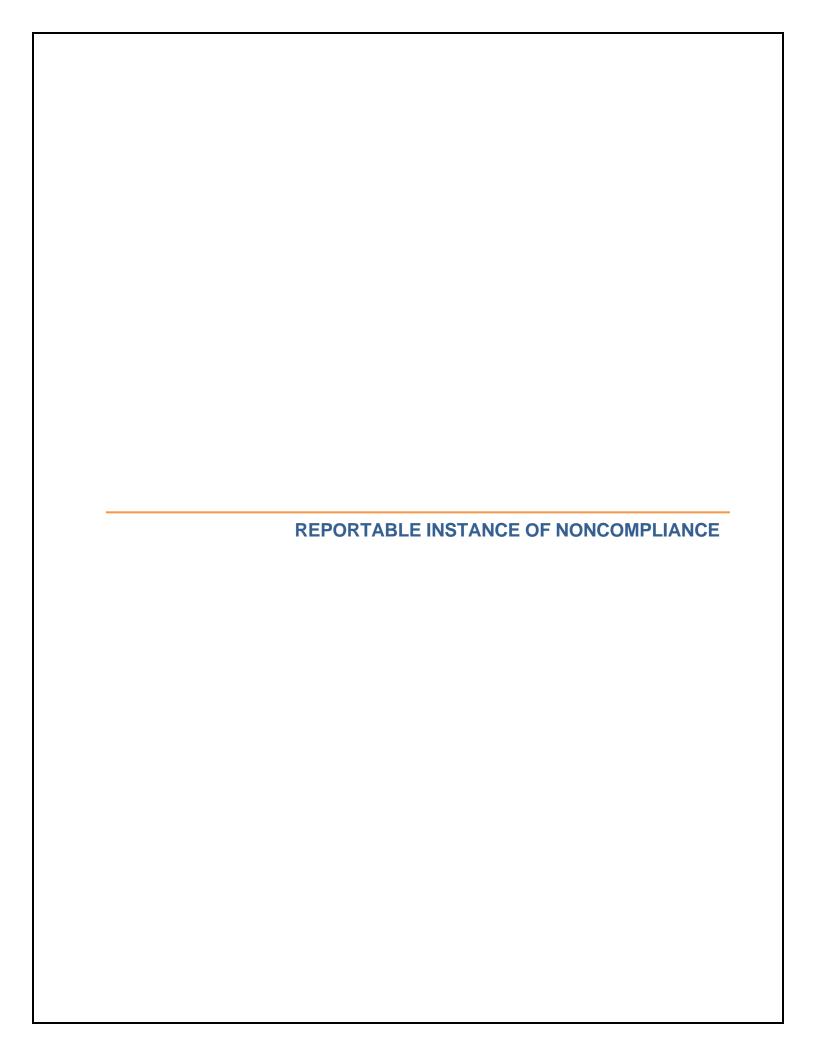
Criteria: Modifications to city IT systems should be supported by documented end-user testing, backout plans, and management approval of changes. In addition, change control procedures should clearly identify documentation requirements for end-user testing. Also, proper segregation of duties requires that only users – not programmers who can make application changes – should be responsible for transaction origination and approval. Lastly, access controls require that the approval of new user access be formally documented to ensure that it was appropriately authorized.

Effect: All of the above described weaknesses result in an increased risk that unauthorized and improper changes to the applications and their data could occur without detection.

Cause: OIT management had not performed sufficient oversight of the change management function to ensure that established procedures are routinely followed and that the policy clearly identifies documentation requirements for end-user testing. In addition, OIT management asserted that the approval function in its recently implemented system for processing change requests was not working correctly during the timeframe when the sampled change requests occurred. Also, it appears that management did not periodically review the access rights assigned to its employees to ensure that duties were properly segregated or, if segregation was not feasible, that appropriate monitoring controls were in place. Regarding the granting of access to new users, OIT management informed us they were in the process of developing a procedure for formally documenting new user access requests and approvals.

Recommendations: To improve general IT controls over financially significant systems, we continue to recommend that OIT management:

- Review change control procedures and implement measures to ensure that required steps for application changes are performed and documented in accordance with the policy. Also, OIT should update its change management policy to include more detail related to documentation requirements for end-user testing [300413.05].
- Revise the three programmers' access rights to the Payroll system so they do not have the ability to enter and approve payroll transaction data. If that option is not feasible, OIT should implement a monitoring procedure to confirm that the programmers' activities are authorized and appropriate [500115.11].
- Review the new hire setup process and develop a procedure to document new user access requests and approvals so they can be easily retrieved for later review and audit [300416.06].



2017-011 NONCOMPLIANCE WITH ACT 148 GRANT REPORTING DEADLINES DELAYED RECEIPT OF FUNDS

Condition: As previously reported, the city's Department of Human Services (DHS) again failed to comply with reporting requirements related to the Act 148 grant, which represents the state share of the County Children and Youth Social Service Program. During fiscal year 2017, DHS was consistently late in submitting the Act 148 required quarterly reports, as summarized in the Table 4 below:

Table 4: Untimely Submission of Act 148 Quarterly Reports					
Ouarter Ending	Report Due Date	Report Submission Date	# of Days Late		
September 30, 2016	November 14, 2016	June 19, 2017	217		
December 31, 2016	February 14, 2017	May 1, 2017	76		
March 31, 2017	May 15, 2017	July 7, 2017	53		
June 30, 2017	August 14, 2017	October 6, 2017	53		

Source: Prepared by the Office of the Controller from review of fiscal year 2017 Act 148 quarterly reports provided by DHS

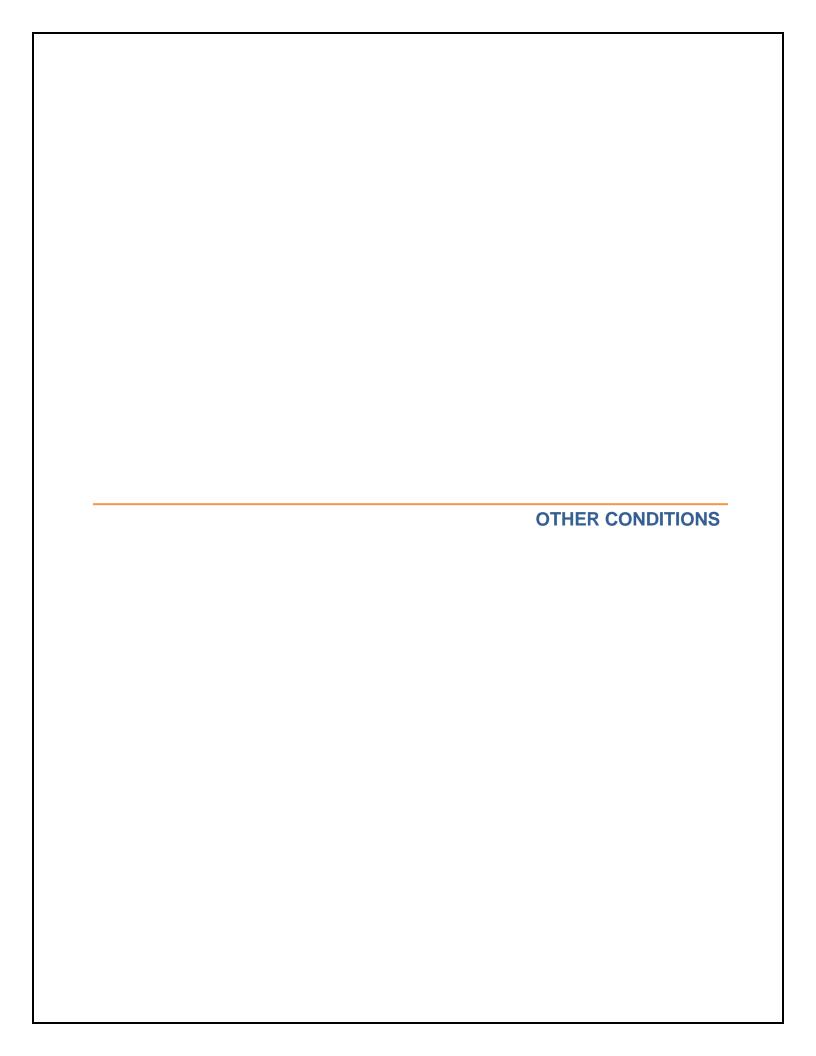
Criteria: Pennsylvania Code Title 55, Chapter 3140, § 3140.31 requires counties to submit quarterly reports of Act 148 grant expenditures within 45 days of the end of each quarter. Certain advance payments and reimbursements of net billable expenditures to counties are dependent upon the state's receipt and approval of these quarterly reports.

Effect: DHS' untimely submission of the Act 148 quarterly reports resulted in delays in receiving grant funding. For example, the state's payment of the fourth quarter advance and second quarter reimbursement was due to the city upon the state's approval of DHS' report for the period ending December 31, 2016. Since DHS submitted that report 76 days late on May 1, 2017 and the state then required DHS to submit revisions to that report in July 2017, a \$57 million payment to the city was unnecessarily delayed until August 2017.

Cause: DHS management attributed fiscal year 2017 reporting delays to the following two factors: (1) ongoing staff shortages in DHS' fiscal unit and (2) the conversion to an automated invoicing process, which required resolving certain technical issues. Management asserted that, going forward in fiscal year 2018, the automation of the Act 148 invoicing should improve the timeliness of report submission. Our review of DHS' fiscal year 2018 Act 148 reports indicated improvement starting with the submission of the report for the quarter ended December 31, 2017, which was sent only one day late.

Recommendations: In order to comply with Act 148 reporting requirements and to accelerate the reimbursement process, we recommend that DHS management closely monitor the effect of the implementation of the automated invoicing process [500117.09]. If it is determined that the new process does not result in the continued timely submission of Act 148 reports, we also again recommend that DHS management:

- Address the staff shortage issue so that there is a sufficient number of adequately trained staff to assist in report preparation [500115.08].
- Obtain a waiver or extension from the state on the 45-day reporting requirement when timely report submission is not possible [500115.10].



2017-012 BETTER OVERSIGHT IS STILL NECESSARY TO ENSURE ACCURATE GRANT REPORTING

Condition: For the past several years, we have reported that the Grants Accounting and Administrative Unit (GAAU) of the Finance Office, working in conjunction with city departments responsible for grants (departments), has provided an inaccurate Schedule of Expenditures of Federal Awards (SEFA) for audit. In a key step in drafting the SEFA, GAAU personnel employ a manual process to enter grant expenditures from the city's accounting system into the SEFA through a fund schedule which is adjusted based on mandatory grant reconciliations provided by the departments.

In the preliminary fiscal year 2017 SEFA submitted for audit, we observed the following errors made by GAAU and the DHS concerning the Children and Youth Social Service Program:

- The total expenditures for the Temporary Assistance for Needy Families (TANF), CFDA #93.558 Title IV, Part A program were significantly understated. Also, expenditures for Stephanie Tubbs Jones Child Welfare Services Program, CFDA #93.645 Title IV-B were not reported. These errors were discovered during the auditor's review of the grant reconciliations provided by GAAU, which were prepared by DHS.
- As reported in the prior year, the TANF, CFDA #93.558 Title IV, Part A program reported
 expenditures for the fiscal year 2015 award which, when totaled from prior year SEFAs
 through the current year, exceeded the award amount.

Despite these isolated errors, we noted considerable improvements in both GAAU's SEFA preparation controls and the SEFA submitted for audit in the current year. Specifically, GAAU provided detailed grants management training, with a special focus on the grant reconciliations, to all departments. Subsequent to the training, GAAU mailed the annual reconciliation request to the departments more than two months earlier than in the prior year. In our opinion, these efforts both increased department management's proficiency and knowledge of the reconciliation process and resulted in a superior and more timely reconciliation completion rate, when compared to the prior year [500114.11].

Additionally, unlike in years past, GAAU produced a thorough and comprehensive reconciliation between the city's accounting system and the fund schedule. This second vital reconciliation significantly reduces the risk that grant expenditures will be inaccurately presented in the final SEFA.

Further, in response to our previous year comment, we observed that GAAU and the related departments took the following corrective action:

Continuum of Care (CoC) Homeless Assistance Program at Office of Homeless Services (OHS) – Beginning in fiscal year 2013, the federal government combined three previous programs — Supportive Housing Program, Shelter Plus Care, and Section 8 Moderate Rehabilitation Single Room Occupancy — into the CoC Program. All new funding should be reported under the CoC's new CFDA number. Grant expenditures, which were reported under the old, incorrect CFDA numbers in the draft fiscal year 2016 SEFA, were correctly reported

under the new CFDA number in the preliminary fiscal year 2017 SEFA.

• Homeless Assistance Program (HAP) at OHS – GAAU, which over reported \$1.7 million in grant expenditures on the federally funded portion of this program in the draft fiscal year 2016 SEFA, accurately reported the HAP expenditures in the preliminary fiscal year 2017 SEFA.

Criteria: The United States Office of Management and Budget (OMB) Uniform Guidance sets forth the city's grant responsibilities, which include maintaining an accurate record of all federal awards received, expended, and identified by the federal program under which grant amounts were received.

Effect: Failure to accurately account and report on grant activity could result in sanctions against the city and possibly the withholding of future grant dollars.

Cause: Our observations suggest that GAAU made the clerical errors noted on the TANF grant when the expenditures on the fund schedule were not properly adjusted based on the reconciliations provided by DHS. Additionally, the expenditures for the Title IV-B program were not included on the SEFA draft due to DHS not providing the grant reconciliations in a timely manner. We confirmed these errors were corrected on the subsequent version of the SEFA, after they were brought to GAAU's attention by the auditors.

Recommendation: As in our fiscal year 2016 report, we again recommend that Finance Office management continue to proactively enforce existing grant-related policies and procedures, especially concerning requesting and obtaining the grant reconciliations, and accurately reconciling the grant activity to the city's SEFA based on these reconciliations [500114.12].

2017-013 UNAUTHORIZED EXPENDITURE APPROVALS COULD LEAD TO IRREGULARITIES

Condition: During the current audit, we again found instances where unauthorized employees approved expenditures. Specifically, our testing of expenditure approvals in ADPICS revealed 32 payment vouchers totaling \$222,572 that were electronically approved by three individuals — one each from the Streets Department, DOA, and Sheriff's Office — who were not formally authorized to perform this function. These three individuals were not listed on the departments' signature authorization cards, which represent the official record of employees designated to approve the purchase of goods and services on the city's behalf.

Additionally, we continued to note the following other related matters:

• For certain city departments whose payment processing function is overseen by the Finance Office's Administrative Services Center (ASC),¹¹ payment vouchers were approved in FAMIS and ADPICS by first level reviewers who were not listed on the department's signature card with final authorization then given by an ASC manager who did appear on the signature card. Finance Office management indicated that they only require the final approver for vouchers processed through the

¹¹ ASC oversees payment processing and other administrative functions for six city departments: OIT, Procurement Department, Finance Office, Treasurer's Office, Civil Service Commission, and Office of Human Resources.

ASC to be listed on the signature card. However, neither the use of the ASC nor this specific requirement is discussed in the city's SAP No. E-0911, *Signature Authorization Cards*.

Voucher approval records in the city's accounting system still had not been properly updated to
reflect changes in the active status of certain city departments. For example, we continued to note
that capital improvement expenditures were approved by Public Property deputy commissioners for
transactions coded as initiated and approved by the Capital Programs Office (CPO). The CPO's
functions and employees merged with Public Property several years ago.

Criteria: To reduce the risk of irregularities, effective internal control procedures dictate that only individuals who are properly authorized should approve payment vouchers. Additionally, records – both the signature authorization cards and the employee approval privileges in the city's accounting systems – should be appropriately updated each time personnel and/or organizational changes occur. The need for keeping signature files up-to-date is formally addressed in the current version of the city's SAP No. E-0911.

Effect: While our sample testing of fiscal year 2017 expenditures did not reveal any irregularities, having unauthorized employees approve purchases could result in a misappropriation of funds.

Cause: The three employees discussed above did not appear on the departments' signature cards but were granted voucher approval privileges in ADPICS. Additionally, the use of the signature authorization cards has evolved over the years from its primary purpose to verify the authenticity of hand-written signatures on payment certifications to the Director of Finance and the City Controller, to its current function of providing an up-to-date record of all individuals authorized to electronically approve payments in the city's accounting systems. Consequently, the need to timely update these cards as situations require and revise SAP No. E-0911 to reflect current practices may not be afforded the same urgency as in the past. Also, voucher approval codes in FAMIS were not updated to reflect the transition of personnel from the now defunct CPO to Public Property.

Recommendations: To ensure that unauthorized individuals do not have access or approval capability within the city's accounting systems, we continue to recommend that Finance Office management:

- Work with the Procurement Department, which is responsible for granting voucher approval
 privileges in ADPICS, to perform a comparison of the signature card files to the list of employees
 authorized to approve vouchers in ADPICS. Identify discrepancies and update the signature cards
 and/or system approval privileges accordingly. Also, consider designing and implementing a
 practice that would require such a comparison to be performed on a periodic basis [500115.02].
- Formalize current signature authorization card requirements and revise SAP No. E-0911 accordingly [500115.03].
- Update FAMIS voucher approval codes to eliminate those relating to the CPO [500115.04].

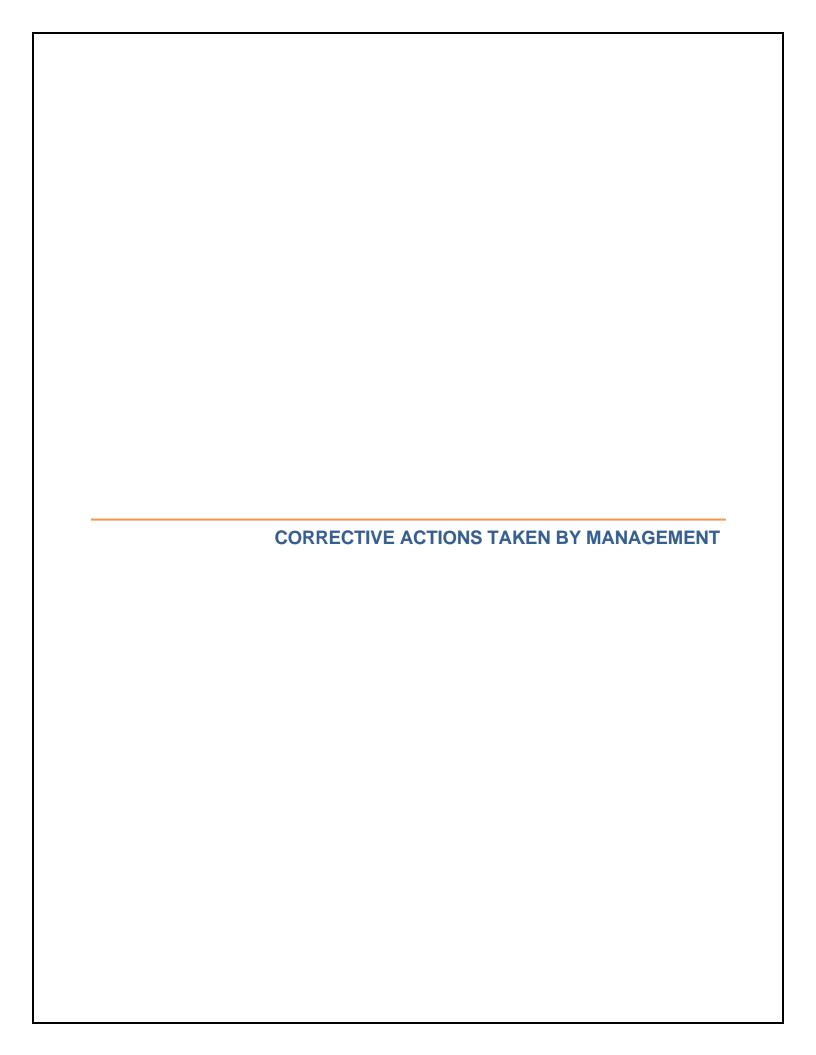
2017-014 CERTAIN OTHER GENERAL INFORMATION TECHNOLOGY CONTROLS NEED ENHANCEMENT

In addition to the significant weaknesses discussed on pages 18 to 19 of this report, the prior audit's review of the OIT's general IT controls over key financial-related applications¹² revealed several other deficiencies with lesser impact. As part of the current audit, we reviewed the OIT's remediation efforts to address these deficiencies. For ten prior noted conditions, we observed that OIT made certain remediation efforts but had not completed corrective action. Our findings involved the following seven areas: (1) risk assessment, (2) IT policies and procedures, (3) authorization of database administrator access, (4) periodic access rights review, (5) password configurations, (6) notification of terminated and inactive users, and (7) contingency planning. Details regarding the ten prior noted conditions and their current remediation status are presented in the table in Appendix I.

2017-015 CONTROLS OVER AIRPORT'S COMPUTERIZED BILLING SYSTEM STILL NEED STRENGTHENING TO MINIMIZE ITS VULNERABILITIES

As part of the current audit, we reviewed the DOA's remediation efforts to address deficiencies identified during our prior review of general IT controls over PROPworks, the DOA's computerized billing system. The DOA made certain remediation efforts, but had not completed corrective action for three prior findings involving (1) no formal documentation of IT control policies and procedures, (2) failure to periodically review user access rights for appropriateness, and (3) inadequate segregation of duties and system audit trails. Details regarding the three prior noted conditions and their current remediation status are presented in the table in Appendix II.

¹² The key financial-related applications included in the review were FAMIS, ADPICS, Payroll, Pension Payroll, Health and Welfare, TIPS, and BASIS2.



CORRECTIVE ACTIONS TAKEN BY MANAGEMENT

As part of our current audit, we followed up on the conditions brought to management's attention during our last review. We routinely monitor uncorrected conditions and report on them until management takes corrective action or until changes occur that resolve our recommendations.

Our follow-up has disclosed that the city made progress addressing several prior issues. We blended the status of some resolved prior-noted conditions¹³ with new observations and reported upon these matters in other sections of this report. Other resolved prior year issues are discussed below. We commend city management on its efforts.

Water Department's Financial Statement Review Procedures Improved

Previously, we reported that PWD management needed to make certain enhancements to the financial statement review process to improve its timeliness and documentation. While the PWD submitted a preliminary review checklist to document that the Water Fund draft statements and supporting compilation were reviewed and approved, several areas on the checklist showed no evidence of review and were marked as open. Subsequent updates to the initial compilation were not accompanied by a signed checklist indicating that the areas were reviewed. While the second checklist submitted with the final statements and compilation was complete with all areas evidencing review, it was not sent until one day prior to the issuance of the final CAFR and audit opinion. Lastly, while there was evidence indicating that PWD officials reviewed the Water Fund statements included in the CAFR, this review was not included as a formal procedure on the checklist.

During the current audit, PWD management made various improvements to its financial statement review process. The PWD submitted a checklist with each version of the financial statements and supporting compilation: the preliminary version forwarded on October 31, 2017, updates sent on January 8, 2018 and February 5, 2018, and the final version submitted on February 21, 2018. All areas of each checklist showed evidence of supervisory review, and signatures of the PWD's deputy commissioner of finance and assistant deputy commissioner of finance as well as the consultant who assisted the PWD in preparing the statements and compilation. The PWD commissioner signed the final checklist, documenting her review and approval of the final statements and compilation. Also, the updated and final compilations were accompanied by a list of revisions indicating which compilation schedules changed, the revision dates, and explanations for the modifications. Lastly, PWD management added the review of the Water Fund financial statements included in the CAFR as a procedure on the checklist. Based on the improvements made by the PWD, we consider these conditions resolved [500114.01, 500116.04, and 500116.05].

Revenue Department's Oversight of Accounts Receivable Improved

Previously, we reported that the Revenue Department needed improved oversight of the accounts receivable reporting function. Revenue Department management did not detect over \$220 million of errors in the department's calculations of accounts receivable and related accounts, with most of the

¹³ The resolved prior-noted conditions involved OIT's removal of development access rights for employees who previously had both development and systems administrator access rights to applications (page 18) and improved training provided by the Finance Office to city grant managers (page 22).

errors involving the Fire Department's Emergency Medical Services (EMS) receivables. This condition was caused by inadequate management reviews within the Revenue Department's FRU, which was responsible for calculating reported receivable amounts. Also, FRU's failure to communicate with the Fire Department regarding the EMS receivable calculation significantly contributed to the error in that receivable. In arriving at the reported EMS receivable, the FRU incorrectly deducted a \$200 million receivable write-off that had not been approved by the city's Accounts Review Panel. Lastly, the procedural manual outlining functions to be performed by the FRU needed to be updated and revised.

During the current audit, Revenue Department management made various efforts to improve their oversight of the accounts receivable reporting function. Revenue Department management informed us that they met on several occasions with Fire Department personnel to discuss the EMS receivable calculation and write-off procedures. We observed one of these meetings on May 15, 2017. Because of these meetings, the Fire Department established written criteria for the EMS receivable write-offs. Also, our testing of the fiscal year 2017 reported accounts receivable and allowance for doubtful accounts found no significant errors in the Revenue Department's calculations. Lastly, in January 2018, the Revenue Department completed the update of the FRU procedural manual, which addressed the procedures for calculating receivables and the allowance for doubtful accounts. Based on the improvements made by the Revenue Department, we consider these conditions resolved [500110.01, 500111.01, and 500113.05].

¹⁴ The Accounts Review Panel, which was established in 1966 by Bill No. 1938, is responsible for approving all write-offs of city receivables. Receivables cannot be written off without first being approved by the Accounts Review Panel.



Prior Condition	Risk/Potential Effect	Recommendation	Remediation Status (Complete or Incomplete)
SECURITY MANAGEMENT 1. IT Risk Assessment: OIT had not yet performed a comprehensive IT risk assessment. While the OIT had a process to monitor technical risks through vulnerability scanning, a formal plan to identify and address additional IT operational, business and compliance risks did not exist.	Without a current and comprehensive risk assessment, IT resources may be used ineffectively in addressing risk affecting OIT.	Develop formal procedures to perform periodic risk assessments and monitor gaps identified. This should be a component of an enterprise wide risk management program [300413.01].	Incomplete: The consultant engaged by the Controller's Office to perform the prior year review of OIT general IT controls provided OIT with a template for a risk assessment plan. OIT management has forwarded this template to its security team to develop a formal risk assessment procedure.
2. IT Policies and Procedures: The Revenue IT group did not provide a documented security policy that governs the BASIS2 application.	Failure to formally develop and document security policies and procedures increases the risk that critical control activities for monitoring security threats may be inconsistently applied. As a result, the BASIS2 application is at an increased risk for data leak and/or loss.	Ensure that the Revenue IT group utilizes a formal security policy for the BASIS2 application. Once the policy is established, the Revenue IT group should periodically review it to determine if it requires updating [300416.01].	Incomplete: OIT provided a draft BASIS2 security policy which addresses the roles and responsibilities of Revenue Department employees and service providers, access controls, audit and accountability, identification and authentication, personnel security, and physical and environmental protection. However, as of the end of our fieldwork in February 2018, the draft policy had not yet been formally approved by executive management.

Prior Condition	Risk/Potential Effect	Recommendation	Remediation Status (Complete or Incomplete)
ACCESS CONTROLS AND SYSTEM FILES 3. Authorization – Database Administrator Access: The OIT was unable to provide evidence documenting the authorization of database access for four IT consultants functioning as database administrators.	Unauthorized access to the database could lead to unapproved or inappropriate database activities and/or direct data table changes.	Maintain evidence for all users granted access to the databases. When granting access to a consultant, obtain and review the consultant's contract and confirm with the supervising manager that the consultant's access is appropriate. Periodically, database access should be monitored to confirm that all accounts are appropriate, authorized, and supported by a new hire form or active vendor contract [300416.04].	Incomplete: OIT provided a draft policy setting forth a process for the granting of database system access to IT consultants. However, as of the end of our fieldwork in February 2018, the draft policy had not yet been formally approved by executive management.
4. Periodic Access Rights Review: A process had not been implemented to periodically review active application user accounts, associated access rights, and group membership.	There is a risk that over time access rights will not be updated due to oversights.	Finalize the draft policy regarding review of user access rights, and work with the impacted departments to complete the required reviews of the active users and their associated access rights for appropriateness [300416.05].	Incomplete: While the Revenue IT group provided us with examples of reports they use to periodically identify inactive users, OIT did not provide any evidence that there were periodic reviews of active users' access rights for appropriateness. OIT had prepared a draft policy requiring (1) evaluation of system privileges assigned to employees transferring or changing job duties, (2) quarterly assessments of all special or privileged access to systems; and (3) biannual reviews of current user access for appropriateness. However, as of the end of our fieldwork in February 2018, this policy had not yet been formally approved by executive management.

Prior Condition	Risk/Potential Effect	Recommendation	Remediation Status (Complete or Incomplete)
5. Password Configurations: While passwords were required for access to the network, applications, and supporting technologies, configurations could be enhanced to strengthen authentication mechanics. Password configurations were inconsistently implemented and did not always comply with established policies at the network, application, and database levels. The OIT Security group had not performed a review of the financial systems' configurations to evaluate compliance with the established password policy.	Inadequate password configurations increase the possibility of unauthorized access to the system, including malicious or accidental data manipulation or breach of data confidentiality.	Review the available configurations of each authentication point and evaluate strengthening the configuration [300413.09].	Incomplete: During the current audit, OIT provided us with an evaluation which identified the limitations of the password configurations for the FAMIS, ADPICS, Payroll, Pension Payroll, Health and Welfare, TIPS, and BASIS2 applications. Only BASIS2 had no limitations listed due to the flexibility of its password policy. OIT management informed us that they could make no further enhancements to the password configurations for the other six applications because they were old legacy systems; however, as these legacy systems are replaced, they will address the noted limitations. The first planned systems replacement is the One Philly project, which will replace the Payroll, Pension Payroll, and Health and Welfare systems, and is expected to go live in December 2018. In light of the above factors, we will no longer continue to recommend that OIT evaluate strengthening the password configurations of the FAMIS, ADPICS, Payroll, Pension Payroll, Health and Welfare, and TIPS applications [300413.09]. In future audits, as those systems are replaced, we will evaluate the password configurations of the new systems.

	Prior Condition	Risk/Potential Effect	Recommendation	Remediation Status (Complete or Incomplete)
Ter The 45 by sevice not req to t app emplessed	er Administration – rminated Users: e prior audit noted that, for 12 of terminated employees sampled us, OIT was unable to provide dence documenting the ification to management or OIT uesting removal of access rights the network and in-scope olications. 15 For all 45 terminated ployees sampled, we noted that exest to the network and all in-spe applications was properly noved.	Without evidence of notification of termination to management and owners of applications, users may retain access beyond their termination date resulting in the possible unauthorized use of these accounts.	Institute a policy establishing formal documentation requirements for notifications to remove employee access, including retention of those notifications so they are available for later review and audit [300416.07].	Incomplete: OIT management developed a policy which addressed both findings # 6 and 7. Management provided us with a draft policy addressing documentation requirements for the notifications to remove the access rights of terminated employees and inactive users. However, as of the end of our fieldwork in February 2018, the draft policy had not yet been formally approved by executive management.
No doc bein Pay app of e inac hav	er Administration – tification of Terminated and netive Users: evidence was provided to rument that notifications were rung sent to the Payroll, Pension wroll, and Health and Welfare polication groups to inform them remployee terminations and crive users (i.e. those users who are not signed in to the application a specified time period).	If notification of employee terminations and inactive users is not being sent to management and application owners, the terminated employees and inactive users may retain access, resulting in an increased risk for the unauthorized and inappropriate use of these accounts.	Institute a procedure requiring that automated notifications of terminated employees and inactive users be sent to the Payroll, Pension Payroll, and Health and Welfare application groups and these notifications be retained so they are available for later review and audit [300416.08].	Incomplete: See comments under finding # 6.

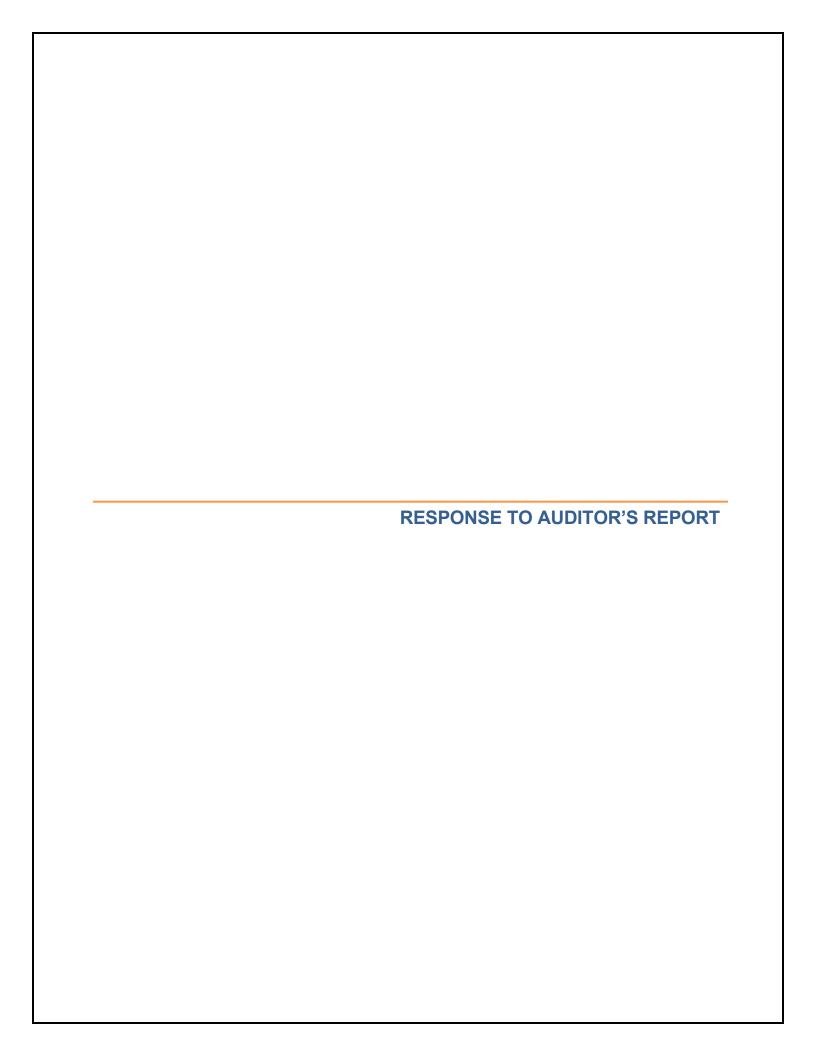
¹⁵ The applications included in our review were FAMIS, ADPICS, Payroll, Pension Payroll, Health and Welfare, TIPS, and BASIS2.

Prior Condition	Risk/Potential Effect	Recommendation	Remediation Status (Complete or Incomplete)
8. Business Continuity Plan: A business continuity plan had not yet been developed for the in-scope applications.	In the event of a disruption of service, city departments may not be able to provide required services or continue limited operations until service is restored.	Communicate with potentially impacted departments to convey the importance of establishing a business continuity plan. Also, provide guidance and assistance in helping the impacted departments when establishing the plans [300413.13].	Incomplete: OIT management informed us that they have obtained the impacted city departments' Continuity of Operating Program (COOP) plans, will review them to identify critical IT operations, and then will determine how OIT can support these critical applications.
9. BASIS2 Disaster Recovery: Testing of the BASIS2 disaster recovery plan had still not been performed.	The disaster recovery plan may not work as anticipated when faced with an unplanned outage.	Periodically test the BASIS2 disaster recovery plan and document the tests and their results in writing [300413.14].	Incomplete: OIT did not provide any documentation to evidence periodic testing of the plan.
10. Disaster Recovery Testing: Our review noted a lack of involvement of city departments in the disaster recovery testing. OIT did not have a process in place to ensure that city departments are sufficiently testing their applications during the recovery process. Out of the five departments notified by OIT to test their applications, only two departments responded.	With city departments failing to participate in disaster recovery testing, there is a risk that the disaster recovery plan may not work as anticipated, which could potentially reduce OIT's ability to restore services in a timely fashion.	Request the assistance of city department heads in requiring department personnel to participate in disaster recovery testing [300416.10].	Incomplete: For the most recent disaster recovery testing conducted in November 2017, OIT provided us with various documents sent to the city departments: e-mails informing them that they were required to participate, the testing instructions, and the feedback form to be completed after testing. There was some improvement in the level of involvement with three of five city departments participating in testing, although only two departments completed the feedback form.

Prior Condition	Risk/Potential Effect	Recommendation	Remediation Status (Complete or Incomplete)
 ORGANIZATIONAL AND MANAGEMENT CONTROLS IT Policies and Procedures: The DOA had not formally documented its policies and procedures governing critical IT control activities, such as: Specific storage locations for data file backups. Periodic testing of backups. Specific identification of alternative processing facilities in the event DOA facilities are significantly damaged or cannot be accessed. Detailed instructions of actions to be taken under varying types of contingencies. Periodic testing of contingency plan. Risk assessment and monitoring of security threats. 	There is an increased risk that critical control procedures may be inconsistently applied or not performed at all. Formal policies and procedures help prevent errors by ensuring uniformity in routine processes.	Develop and document formal written policies and procedures that address specific storage locations for data file backups; specific identification of alternative processing facilities; detailed instructions of actions to be taken under varying types of contingencies; periodic testing of the contingency plan; and assessing and monitoring security threats. All written procedures governing IT control activities should be formally approved by DOA management [500114.16].	Incomplete: The DOA's IT Director provided us with written control procedures that addressed periodic testing of backups. However, the written procedures mentioned a general rather than specific storage location for data file backups. Also, the procedures still lacked the following elements: • Specific identification of alternative processing facilities in the event DOA facilities are significantly damaged or cannot be accessed. • Detailed instructions of actions to be taken under varying types of contingencies. • Periodic testing of contingency plan. • Risk assessment and monitoring of security threats Lastly, the written procedures provided by the IT Director were not formally approved by DOA management.

Prior Condition	Risk/Potential Effect	Recommendation	Remediation Status (Complete or Incomplete)
2. Periodic Access Rights Review: The DOA's written control policy stated that the PROPworks database administrator was responsible for periodic review of user access rights. However, the policy did not address the frequency of this review or the specific steps to be performed. Also, the DOA did not provide any documentation to evidence that a periodic access rights review had been performed.	Unauthorized access to data increases the risk that data could be compromised without management detection.	Implement a procedure to periodically review the active users and their associated access rights for appropriateness. The performance of this review should be documented in writing [500114.18].	Incomplete: The DOA did not provide any documentation to evidence that a periodic access rights review had been performed.
3. Database Administrator's Access Rights and System Audit Trails: The DOA did not adequately segregate the duties of a consultant who served as the PROPworks database administrator. The consultant, who was responsible for maintaining PROPworks, installing application changes from the vendor, and backing up system data, also granted and removed user access and had the ability to add, change, or delete transaction data and clear system audit trails. DOA management decided that the database administrator would continue handling the same duties. Management indicated the vendor's recommended protocol is for the database administrator to control user access permissions and asserted that, in the airport's technological environment, it makes more sense for the database administrator to continue performing	The combination of duties performed by the database administrator in conjunction with the system audit trails not being sufficiently detailed or monitored increases the risk of intentional manipulation of billing data without management detection.	To address the continuing risk of the database administrator's incompatible duties, formally establish and document an independent monitoring procedure to confirm that the database administrator's activities are authorized and appropriate. Someone with direct access to PROPworks but no ability to change the system or its data should perform this review. Once the vendor adds more detailed audit trails, then the independent monitoring procedure should incorporate a review of those audit trails [500114.20].	Incomplete: The DOA's IT Director informed us that the vendor planned to add more detailed audit trails to PROPworks during calendar year 2018. Although DOA management asserted that the security officer now had access to PROPworks to review the system log files for unusual activity, the DOA did not provide any documentation to evidence that these reviews had been performed.

Prior Condition	Risk/Potential Effect	Recommendation	Remediation Status (Complete or Incomplete)
these duties.			
Also, there was no periodic independent review of the system audit trails for unusual activity. Furthermore, DOA management indicated that the current system audit trails lacked details on the specific data modified by users and adding more detail would require software modifications from the vendor.			
In lieu of reviewing audit trails, management indicated they assigned a security officer to periodically monitor activity in PROPworks. However, the security officer did not have access to PROPworks and instead obtained system reports directly from the database administrator, a situation which we believed lessened the effectiveness of the security officer's review.			





CITY OF PHILADELPHIA

OFFICE OF THE DIRECTOR OF FINANCE Room 1330 Municipal Services Building 1401 John F. Kennedy Boulevard Philadelphia, PA 19102-1693 (215) 686-6140 FAX (215) 568-1947 ROB DUBOW DIRECTOR OF FINANCE

June 5, 2018

The Honorable Rebecca Rhynhart City Controller 1230 Municipal Services Building 1401 John F. Kennedy Boulevard Philadelphia, PA 19102-1679

Re: Report on Internal Control and on Compliance and Other Matters - Fiscal 2017

Dear Ms. Rhynhart:

Thank you for the opportunity to discuss the contents of your draft report at the exit conference held on Monday, May 21, 2018. Before responding to the findings and recommendations, I would like to thank you for noting the resolution of prior year findings, including: improved oversight of Accounts Receivable reporting by the Revenue Department, and improvements in the review process of Water Department financial statements. Additionally, I appreciate that your report outlines the process the City Treasurer is following to bring all bank reconciliations up to date and that your report recommends we continue with the processes that we have in place.

We offer the following responses to the findings and recommendations found in the Controller's Office audit for fiscal year 2017:

Staff Shortages and Turnover Along with Lack of a Comprehensive Financial Reporting System Have Contributed to Significant Financial Statement Errors

Finding & Recommendation: You have repeated your finding that continuing to operate with a reduced staff size relative to fiscal year 2000 and having no comprehensive financial reporting system have contributed to errors in financial statements presented for audit. However, you do note that errors were corrected prior to finalizing the Comprehensive Annual Financial Report (CAFR) and that the CAFR is a reliable document for informative decision making. You continue to recommend that Finance either hire more accountants or invest in a new comprehensive financial reporting system that will reduce the current labor-intensive procedures needed to prepare the city's CAFR. Further, you recommended that management provide adequate training for new hires and employees performing new duties.

Response: The Accounting Bureau (Accounting) is committed to producing an accurate and well-prepared CAFR. We believe that the loss of institutional knowledge over time has presented a challenge, as opposed to

the reduction in the quantity of staff. Accounting is actively working with the Office of Human Resources on strategies aimed at retention of staff to reduce turnover and maintain the knowledge base. We have also increased our training efforts, with all senior management accountants now attending the National Government Finance Officers Association (GFOA) conference and taking advantage of the City sponsored quarterly CPE classes. We will continue to look for additional effective training opportunities for our staff.

Accounting is pursuing several other paths that will assist in more reliable CAFR preparation. First, as you noted, we have retained an outside accounting firm to assist in the CAFR compilation efforts. This firm will replicate for Accounting the efforts currently undertaken by both the Division of Aviation (DOA) and Philadelphia Water Departments (PWD). We believe that a CAFR preparation system will improve the process and will be evaluating the timing for implementation of such a system as we move forward with our planning efforts around replacement of FAMIS.

Additionally, Accounting has received the GFOA Certificate of Achievement for Excellence in Financial Reporting for 37 consecutive years and has successfully addressed all GFOA recommendations presented in that process. Finally, and as always, Accounting will continue to critique the errors and adjustments resulting from the most recent (FY2017) CAFR audit with the entire accounting staff as a learning tool to produce improved financial statements going forward.

FAMIS Not Utilized for Posting Enterprise Funds' Year-End Journal Entries

Finding & Recommendation: You report that Finance, PWD and DOA are not utilizing the full accrual Water and Aviation Funds in FAMIS to post year-end entries. You recommend that PWD begin using the full accrual Water Fund in FAMIS to post adjusting entries, and that DOA bring the information up to date, as they have not updated the full accrual fund since 2014.

Response: Finance Accounting is committed to working with both PWD and DOA, who have indicated their willingness to utilize the FAMIS full accrual Water & Aviation funds to post year-end adjustments.

Late Receipt of Component Unit Financial Reports Still Delayed Preparation and Audit of CAFR

Finding & Recommendation: Your report states that late submission of financial data by some of the City's component units continues to result in delays to the financial reporting and auditing process, increasing the risk of errors or omissions. You recommend that Accounting request the assistance of the Finance Director or Mayor early in the CAFR preparation process to secure the cooperation of component unit management in the timely submission of their financial data. Further, you recommend that the Accounting staff complete their evaluation of potential component units and request financial statements from all units identified as component units earlier in the process.

Response: We agree that the timely submission of all component unit reports is critical to the timely issuance and accuracy of the City's CAFR. Despite meetings with management and auditors of various component units concerning timely audit submission, as well as additional meetings to provide guidance and assist with problems in units experiencing issues that were delaying the preparation of their financial reports, we still had some trouble with timely receipt of final audit reports. Accounting will continue to communicate with the component units and emphasize the importance of timely submissions. As appropriate, Accounting will continue to reach out to key Administration officials to secure the cooperation of component unit management in the timely submission of their respective financial reports. Additionally, we agree that a timelier evaluation of potential component units would be beneficial to the process. To achieve this goal, Accounting has updated the year-end request for information form to determine component unit status, and for this year, has already sent requests to both the School District (due to the change in composition of the Board), the Free Library

Foundation and the Fairmount Park Conservancy (due to potential additional Rebuild activities) so that we have ample opportunity to review their status.

Treasurer's Failure to Properly Reconcile the Consolidated Cash Account Creates Possibility of Significant Undetected Errors and Improprieties

Finding & Recommendation: You report that the Treasurer's Office had not reconciled the Consolidated Cash account for the first eleven months of 2017, that they were not reconciling Revenue's daily Consolidated Summary of Deposits (CSD) to the daily bank deposits, nor were they explaining or investigating variances that were identified. You recommend that we continue the activities that we have already implemented to address this problem.

Response: As noted in the Controller's report, we have put in place steps to deal with this issue and we plan to continue with these steps until the reconciliations are completed. The steps we have taken to address the reconciliation issue include:

- Increased staffing in the Treasurer's Office to ensure that we stay current with all reconciliations going forward;
- Hired an outside accounting firm to identify the causes of the variance, which has decreased from \$40 million to \$28.6 million;
- Working with an outside consultant to develop additional internal controls to ensure that we don't fall behind again;
- Preparing weekly status reports so that we closely monitor progress not only on the Consolidated Cash Account, but on all accounts.

The City Treasurer will personally oversee this process until a new Deputy Treasurer for Cash Management is hired and then she will jointly oversee the process with the new deputy treasurer.

As noted in your report, the CTO has reinstituted the daily process to match all receipts on Revenue's Consolidated Summary of Deposits (CSD) to what is posted in FAMIS and the bank. The CTO has also reinstituted the monthly reporting of the reconciling items found as variances when comparing the CSD and bank reported transactions. This list continues to be sent out as monthly reconciliations are completed. As items are identified/explained by the various City departments, the proper journal entries or revenue validations are completed to clear the reconciling items from the list or funds are transferred as required. As monthly reconciliations are completed for Consolidated Cash and all accounts, they are being appropriately reviewed and signed off on in compliance with the City's Standard Accounting Procedure, number 7.1.3.b.

CTO is working to develop a revised process for handling the Department of Public Health's (DPH) revenue receipts, which has presented additional challenges because they are handled in a different manner through a different account than the other Revenue deposits. The process, estimated to be in place early in fiscal year 2019, will allow CTO to reconcile and report on DPH revenues with full transparency and allow easy identification of reconciling issues in the consolidated cash account.

Finally, the CTO has a preliminary schedule from the outside accounting firm who was retained to assist with the Consolidated Cash reconciliation backlog and processes. The firm anticipates making preliminary recommendations and providing trend analysis in late September 2018, completing its work by the end of November, and issuing a report in December 2018. The final report will include detailed discussion on the results of the reconciliations, recommendations to address any unresolved discrepancies, suggestions for changes to internal controls and corrective action plans to ensure that the City doesn't fall behind on reconciliations in the future. While the firm is doing its work, the CTO will have weekly meetings to get updates on its progress.

Treasurer's Failure to Reconcile Certain accounts for Years Increases the Risk for Irregularities

Finding & Recommendation: Your report acknowledges that there were improvements in the timeliness of reconciliations as compared to the prior year. However, you report that there are six accounts that have not been reconciled for several years, subjecting the City to the increased risk of errors or irregularities. Further, because the accounts have not been reconciled, you have reported that the City may be out of compliance with the Pennsylvania Disposition of Abandoned and Unclaimed Property act (escheat act) that requires unclaimed checks to be escheated to the State after two or three years (depending on the payment type).

Response: CTO acknowledges the finding regarding reconciliation timeliness. The CTO has established working plans to address the reconciliations of all the listed past-due accounts. The table below details the projected timelines to bring the noted accounts current.

Account	Last Month Reconciled.	Projected Completion
Levy	Jun-14	Dec-18
General Disbursement	Jan-12	Dec-18
Employee Payroll-Wells Fargo Accts	Sep-10	Jun-18
Supplemental Payroll-Wells Fargo Accts	Sep-10	Jun-18
Pension Disbursement-BoA	Jul-14	Sep-18
Pension PDAA- BoA	Dec-15	Oct-18

CTO transitioned the Payroll Account and Supplemental Payroll Account from Wells Fargo to Citizens Bank in July 2017. Since the account transfer to Citizens Bank, both the Payroll Account and Supplemental Payroll Account reconciliations have been completed each month. CTO is committed to having the Wells Fargo accounts reconciled by June 30, 2018. This will include the escheatment and disbursement of all outstanding checks and closing of the accounts.

For the City's General Disbursement account, the plan is to have the bank account reconciled by December 2018, at which time CTO will also have escheated and cleared all outstanding uncashed checks for years 2012 through 2015.

The Bank of America Pension Disbursement and Payroll Deduction Accounts were transferred to Citizens Bank in November 2017. Since the transfer, reconciliations have been completed each month. Both Bank of America accounts will be reconciled and closed out by October 2018.

CTO is committed to continued compliance with the City's Standard Accounting Procedure for Uncashed/Unclaimed checks.

Payment Vouchers Approved Without Required Management Approval

Finding & Recommendation: Your report finds that 61 vouchers exceeding \$500,000 were approved without a department head or authorized deputy's signature. You recommend that Finance verify proper department signatures are in place before approving any vouchers exceeding \$500,000.

Response: We agree that this process should be followed, and the requirements have been reviewed and reinforced with all Accounting Financial Verification staff.

Allowing Unauthorized Individuals to Approve Bi-Weekly Payrolls Increases Risk for Improprieties

Finding & Recommendation: Although you found no improprieties, your audit noted that discrepancies between the Finance official signature files and the approval privileges assigned within the on-line payroll system expose the City to risk. You recommend that Finance continue to compare the executive-level approvers in the online payroll system to the signature authorization cards to ensure that all individuals are properly authorized and have appropriate access to the system, that we send periodic notices throughout the year regarding signature card requirements and update the standard accounting procedure (SAP) related to Signature Authorization Cards (#E-0911).

Response: While you identified this as a risk, we are pleased that you found no improprieties in your review. As noted in your report, the Payroll division has already implemented procedures to regularly compare officials who approve the on-line payroll to the signature card files. Payroll will work to improve the timeliness of these reviews. Additionally, Payroll will send periodic notices throughout the year to the Human Resource and Payroll communities regarding signature card requirements. In anticipation of the rollout of the OnePhilly system expected at the end of 2018, Payroll-related SAPS are currently under review for necessary revision.

Failure to Segregate Payroll Duties Could Allow Fraud to Occur

Finding & Recommendation: Your audit found that departments were allowing the same individual to both post and approve the on-line payroll time records or to approve at both the supervisory and executive levels. You recommend that Finance continue to remind city agencies of the importance of maintaining adequate segregation of duties regarding payroll, particularly those departments who do not have different individuals assigned for all three payroll approval levels. Additionally, you recommend that Finance work to ensure the new OnePhilly system limit the number of instances that an individual can approve at two or more levels to a set number.

Response: We will continue to remind operating departments that the same employee should not be signing off on more than one level of payroll. As we have consistently stated, to ensure that employees will be paid on time, there will be instances where one individual signs off at more than one level when all employees at all levels are unable to do so. We will take into consideration your recommendation that the OnePhilly system limit the numbers of instances where this will be permitted.

Lack of a Comprehensive Capital Asset System Hampered Reporting Process

Finding & Recommendation: Your report states that Finance employs a cumbersome series of Excel and Lotus files, along with FAMIS, to account for the City's real property capital assets. You recommend that the City design or purchase a comprehensive capital asset management system.

Response: We agree it would be beneficial for the City to a have capital asset system. Unfortunately, resources have not been identified to fund either the system or the ongoing operating costs for staff that may be required to maintain the system. In the meantime, the current process will continue to be used. It should be noted the current methodology used by Accounting provides financial information that is accurate and auditable, even though it does not provide the level of detail that a capital asset system might provide.

Failure to Inventory Real Property Assets Increases Risk of Inaccurate Accounting Records

Finding & Recommendation: You indicate that the City's real property assets have not been inventoried recently and that there is no type of "plain language" report on the condition of the City's capital assets. You recommend periodic physical inventories of all real property assets, timely updating of related property records, as well as the development of a plain language report on the condition of the City's capital assets. You also recommend comparing the list of capital assets created by the City Planning Commission to Finance's records to identify any discrepancies.

Response: We agree that there is no formal written process to document that a physical inventory is occurring and no one system/report where data on all city property and conditions are stored. Departments do, however, inspect their properties regularly and develop their capital and maintenance budget requests based on the conditions they identify.

The Department of Public Property (DPP) maintains an asset management system that includes nearly 4,000 City assets including office buildings, picnic shelters, cell towers, recreation facilities, fire and police stations, and other city assets. This system, known as the Integrated Workplace Asset Management System (IWAMS) uses as its "backbone" the master facilities database originally prepared and maintained by the City Planning Commission. IWAMS was rolled out to City agencies in late 2017 and is operated and maintained by staff at DPP. It currently includes facility information for Parks and Recreation, Public Health, and facilities within DPP's purview. IWAMS also can track energy usage and capital spending data output from FAMIS.

Additionally, DPP is completing a master plan of public safety facilities that identifies capital needs for approximately 80 major Police and Fire facilities. The master plan will assess the physical condition and needs of those facilities and will include recommendations for investments in those facilities. The data for these facilities will be included in the IWAMS system.

While IWAMS does not yet include condition assessment data for all the city's real property assets, a comparison of the system records to Finance's records will help to ensure that Accounting's list of assets is complete and accurate. Accounting will explore with DPP a method to compare the inventory in the IWAMs database to that in FAMIS. While the system may aid in ensuring the list is complete and accurate, it is not able to be used to calculate depreciation and book value of City-owned assets that meet Accounting reporting requirements. I believe the longer-term solution would be to acquire a capital assets management and depreciation module when the FAMIS accounting system is replaced within the next few years.

Failure to Timely Transfer Funds Between City Bank Accounts Could Result in Significant Reporting Errors

Finding & Recommendation: You reported that Finance Office accountants did not timely prepare cash transfer authorizations (CTAs) for \$10.3 million of pending transfers due from the Water and Aviation Fund bank accounts to the consolidated cash account. To stay timely on the CTA's, you recommend that Finance develop and train accountants on the proper procedures, including a requirement to perform monthly reconciliation of the equity in Treasurer's account balances per FAMIS to Treasurer account book balances. As those monthly reconciliations are completed, the accountants must promptly prepare and submit to the Treasurer's Office requests to perform the necessary cash transfers.

Response: We agree with your finding and will work to timely reconcile and prepare necessary CTAs. Additionally, Accounting will follow-up with CTO to ensure the requested CTAs are effectuated.

Lax Monitoring of Adjustments to Tax Accounts May Lead to Undetected Errors or Irregularities

Finding & Recommendation: Although reviews had been performed for prior years' activity, you found that the Revenue Department did not perform reviews/monitoring of daily payment and receivable adjustment activity in TIPS for fiscal 2017. You recommend that Revenue reinstitute the regular monitoring process and that supervisory personnel independent of the adjustment process review the daily adjustment reports for patterns of irregular activity and test a sample of adjustments for accuracy and propriety. To evidence that these checks are performed, the supervisor should sign and date the adjustment reports upon completion of the reviews.

Response: Again, we are pleased that your testing found no instances of inaccurate or improper activity. To reduce the risk of any adjustments being made without proper authority or reliable and reasonable supporting documentation, the Department of Revenue has reinstituted control measures that include having an individual

who has no control over the adjustment process regularly monitor daily payment and receivable adjustment activity. The monitoring of these adjustments is performed by randomly selecting transactions from the daily adjustment report and having the person or supervisor of the unit where the adjustment originated provide sufficient evidence and supporting documentation for the adjustment. The evidence, documentation and adjustment reports are kept by the independent reviewer and are available upon request. The random audits deter opportunities for a person to perpetuate and conceal irregularities.

SAPs Require Updating to Ensure Accurate and Consistent Application of Accounting Rules and Regulations

Finding & Recommendation: You have repeated your finding that the City's Standard Accounting Procedures (SAPs) have not been revised to reflect automated processing applications and practices currently in use. You recommend that Finance conduct a thorough review of its SAPs, rescind or revise those that are out of date, and develop a schedule for periodic updates.

Response: Accounting is committed to continually review and update the SAPs. On a limited basis, and to ensure that we comply with any changes in accounting regulations or governmental regulations, these procedures have been updated, especially in areas that could be susceptible to irregularities and those that have been cited in prior audit reports. As you noted in your report, Finance contracted with an outside accounting firm to assist in a comprehensive update of our SAPs. Work by the consultant to date includes the development of new numbering system for the SAPs and the development of a template for a new SAP manual that will house all SAPS in a consistent format. Also, there is a preliminary plan that lists every SAP, a prioritization of each for updating and who will be responsible. Accounting has requested and received feedback from the Controller's Office on the prioritization of updates. More specifically, Accounting is currently working on updates to 4.1.1.i Automated Clearing House (ACH) and E-7201 Reporting on Donation of Capital Assets. We have also asked the OnePhilly team to review payroll-related SAPs as they continue their efforts to implement a new citywide payroll system.

Our next deliverable from the consultant will be a schedule for completion of the review of all SAPs.

General Information Technology Controls Require Strengthening

Finding & Recommendation: You recommend that OIT review change control procedures and ensure that required steps for application changes are performed and documented according to the policy; review programmers' access rights to the Payroll system so they don't have the ability to both enter and approve payroll transactions data or implement a procedure to confirm that the programmers activities are authorized/appropriate, and review the new hire setup program to document new user access requests and approvals.

Response: OIT has provided the following responses to the Controller's findings & recommendations.

Change Control Procedures. OIT has a Change Control process in place for updates and code changes for all major IT systems. An IT manager/director submits a change control in the SysAid (help desk) system. A Change Control Board review meeting is initiated by the Chief Security Officer and includes the directors of divisions for Platform Engineering, Database, Networking, Web and Operations. The board members review the request and the IT director is asked to demonstrate testing plan, back-out plan, and need. Testing and back-out plans are amended based on input by Board members of associated impacts to other systems.

Currently OIT does not include all documentation of the Change Control Board review process in the SysAid record. OIT recognizes the value of amending its processes to record documentation associated to a change control and will look to institute these measures.

Programmer Access: The programmer access rights were requested by Finance-Payroll to ensure specific payroll processing tasks were completed during a short time frame where Finance staff were out of the office

and experienced OIT staff were determined to be the best substitutes for the process. Access was limited to two programmers, with a full audit trail of actions in place. Permissions were revoked when the tasks were completed. Upon implementation of OnePhilly, this type of request is not expected to occur again, as the payroll processes in question will be automated, unlike the current process.

New Hire Setup: OIT formally receives requests for user access for IT systems through a web based help desk system (SysAid). Support Center staff review the request, verify the requestor and their authorization to make the request through contact with the designated departmental administrator(s) for the system in question. Additional oversight occurs at the departmental level with a monthly review of personnel and system access changes.

Non-Compliance with Act 148 Grant Reporting Deadlines Delayed Receipt of Funds

Finding & Recommendation: Your review determined that the Department of Human Services (DHS) was late in submitting the Act 148 quarterly reports required for reimbursement of City DHS expenses, thereby resulting in delays in receipt of grant funding by the City. You recommend that DHS carefully monitor the effects of the recent conversion to an automated invoice processing system. If quarterly reports are still unable to be submitted timely with the new system in place, you recommend that DHS address staffing shortages and request extensions from the State when they are unable to meet the 45-day reporting requirement.

Response: DHS continues to improve the timeliness of submitting the Act 148 invoice. The FY17 fourth quarter invoice was 53 days late, which was an improvement over the FY16 fourth quarter submission, which was 180 days late. In FY18, DHS has dramatically reduced its tardiness in submitting the invoice. The FY18 second quarter invoice was submitted only five days late, and the third quarter invoice was submitted one day early on May 14, 2018. DHS plans to continue submitting invoices in a timely manner going forward, avoiding the need for extensions or waivers.

Better Oversight Is Still Necessary to Ensure Accurate Grant Reporting

Finding & Recommendation: Your report noted considerable improvements in the Schedule of Financial Expenditures (SEFA) preparation controls and in the SEFA itself. You further noted that the training the Grants Accounting and Administrative Unit (GAAU) provided and their early request to departments for annual reconciliations had increased departments' proficiency and knowledge of the reconciliation process and resulted in a superior and more timely reconciliation completion rate. Despite these improvements, you reported two errors related to the DHS Temporary Assistance for Needy Families (TANF) grants — one instance of underreporting expenditures and another showing expenditures that exceeded the award amount. You recommend that Finance continue to enforce grant-related policies and procedures, especially concerning requesting and obtaining grant expenditure reconciliations and accurately reconciling grant activity in FAMIS to the city's SEFA.

Response: We agree it is important that departments are aware of recording/reporting requirements and the need to keep GAAU informed on all grant activity. GAAU will enforce its existing policies in compiling the grant profiles submitted by the departments to ensure that complete and accurate grant profiles are being established, including proper identification of CFDA numbers and the reconciliation of grant accounting records to grant reimbursement requests. GAAU will remain diligent in its review process to ensure proper expenditure recording and reconciliation of the amount billed to Grantors. The unit intends to build upon the improvements you noted in FY17 to ensure an accurate SEFA is produced in FY18.

I appreciate your acknowledgement of the effectiveness of the grants training provided by GAAU and the positive effect this had on the grants reconciliation processes. GAAU is planning additional training in calendar year 2018 that will cover other areas of the "post-grant award" process, which begins with the grant profile submission to GAAU by the department and ends with grant close-out. Agencies will be encouraged again during upcoming training sessions to establish internal grant oversight committees as recommended by the

Government Finance Officers Association as a best practice. GAAU will also encourage city agencies to seek grant training offered by grantors on websites such as www.grants.gov.

The individual TANF reporting errors you noted were corrected and reported properly on the FY2017 SEFA. DHS was notified of these errors and is making efforts to improve their reconciliation processes. They report that more frequent reviews of expenditures against revenue sources are being completed, and transfers or changes are identified collaboratively during regular meetings between DHS and GAAU staff.

Expenditure Sign-offs Could Lead to Irregularities

Finding & Recommendation: Although you found no irregularities or misappropriation of funds resulting from this condition, your report stated that payment vouchers were approved electronically in ADPICS by employees not formally authorized on agency signature cards to perform this function. In addition, you indicated that various records have not been updated reflecting the merger of Public Property and the Capital Program Office. You recommend that Finance work with the Procurement Department to implement a practice requiring a comparison of the signature card files to the list of employees authorized to approve vouchers in ADPICS on a periodic basis; that we formalize current signature card requirements in a revised SAP No. E-0911; and update FAMIS voucher approval codes related to the Capital Program Office, which is now part of the Department of Public Property.

Response: Accounting will work with the Procurement Department to ensure they have the most updated signature cards for each department, and the Procurement Department will reinforce its protocol that final approvers of expenditures in ADPICS must be on the departmental signature cards. Accounting keeps an electronic log of signers authorized to approve vouchers that mirrors the names on the required signature cards. They review the electronic log and reject those vouchers submitted without an authorized signer. As an additional control, Accounting reviews the bi-weekly inactive employee report from OIT and revokes FAMIS permissions of any inactive employee. We will discuss these processes with Procurement to determine how tighter controls on ADPICS approvals may be implemented. The Procurement Department will compare a list of employees authorized to approve vouchers in ADPICS with the signature card files provided by the Finance Department.

You note specifically that vouchers processed by Finance's Administrative Service Center (ASC) were "approved" by a first level reviewer not on the agency signature card. However, each of these vouchers received final approval from an employee who is listed on the agency signature cards as an authorized signer. We are comfortable if the initiators/reviewers are not on the agency signature card because the Finance employees who provide final approval are listed on the department's signature cards. When Accounting updates SAP No. E-0911, Signature Card Authorization, to reflect upcoming changes in the signature card process, it will include the policy related to the ASC approving certain other city departments' vouchers.

There is an extensive amount of work involved to migrate all the old CPO encumbrances with minimal benefit. We will allow this situation to self-correct with the existing encumbrances lapsing over time as the funds are expended. We will ensure going forward that no new encumbrances are established under the old Capital Program Office.

Certain Other General Information Technology Controls Need Enhancement

Your report included findings related to the Office of Information Technology's (OIT) controls over financial-related applications. You noted that they made certain remediation efforts but had not completed all corrective actions. We have forwarded those findings to OIT for their review and OIT's responses are attached in Appendix I.

Controls Over Airport's Computerized Billing System Still Need Strengthening to Minimize Its Vulnerabilities

Finding & Recommendation: Your report finds that the Division of Aviation (DOA) made certain improvements to address deficiencies cited in your prior audit, but that they had not completed corrective action on three items: 1) no formal documentation of IT control policies and procedures, 2) failure to periodically review user access rights for appropriateness, and 3) inadequate segregation of duties and system audit trails. A more detailed description of your findings is included in Appendix II to your report.

Response: Attached is a response that the Airport provided addressing the specific findings in your Appendix II.

Thank you for the observations provided in your report and for the opportunity to respond. We look forward to continued cooperation with your office.

Sincerely,

Rob Dubow Director of Finance

Enclosures

cc: Jane Slusser, Mayor's Chief of Staff

Josefine Arevalo, Accounting Director, Finance Department
Tracey Borda, Chief Financial Officer, Division of Aviation
Frank Breslin, Revenue Commissioner & Chief Collections Officer
Christine Derenick-Lopez, Chief Administrative Officer
Kathleen Duggan, Audit Director, City Controller's Office
Jacqueline Dunn, Chief of Staff, Finance Department
Rasheia Johnson, City Treasurer
Ellen Kaplan, Chief Integrity Officer
Melissa LaBuda, Deputy Commissioner, Water Department

Christopher Simi, Deputy Commissioner, Department of Human Services

Christy Brady, Post-Audit Deputy City Controller Catherine Paster, First Deputy Director of Finance

Kellan White, First Deputy City Controller

Prior Condition	Risk/Potential Effect	Recommendation	Remediation Status
SECURITY MANAGEMENT 1. IT Risk Assessment: OIT had not yet performed a comprehensive IT risk assessment. While the OIT had a process to monitor technical risks through vulnerability scanning, a formal plan to identify and address additional IT operational, business and compliance risks did not exist.	Without a current and comprehensive risk assesment, IT resources may be used ineffectively in addressing risk affecting OIT.	Develop formal procedures to perform periodic risk assessments and monitor gaps identified. This should be a component of an enterprise wide risk management program [300413.01].	Incomplete: The consultant engaged by the Controller's Office to perform the prior year review of OIT general IT controls provided OIT with a template for a risk assessment plan. OIT management has forwarded this template to its security team to develop a formal risk assessment procedure. 6/5/18 OIT Response: OIT is in process of contracting with a consultant for a full IT Security
2. IT Policies and Procedures: The Revenue IT group did not provide a documented security policy that governs the BASIS2 application.	Failure to formally develop and document security policies and procedures increases the risk that critical control activities for monitoring security threats may be inconsistently applied. As a result, the BASIS2 application is at an increased risk for data leak and/or loss.	Ensure that the Revenue IT group utilizes a formal security policy for the BASIS2 application. Once the policy is established, the Revenue IT group should periodically review it to determine if it requires updating [300416.01].	Incomplete: OIT provided a draft BASIS2 security policy which addresses the roles and responsibilities of Revenue Department employees and service providers, access controls, audit and accountability, identification and authentication, personnel security, and physical and environmental protection. However, as of the end of our fieldwork in February 2018, the draft policy had not yet been formally approved by executive management. 6/5/18 OIT Response: The draft policy has been prepared by OIT Revenue and is under review by OIT's Chief Security Officer.

Remediation Status	Incomplete: OIT provided a draft policy setting forth a process for the granting of database system access to IT consultants. However, as of the draft policy had not yet been formally approved by executive management. 6/5/18 OIT Response: The Database Access Policy has been drafted and will be presented to OIT Executive Management for review and approval. A copy can be provided once completed.	Incomplete: While the Revenue IT group provided us with examples of reports they use to periodically identify inactive users, OIT did not provide any evidence that there were periodic reviews of active users' access rights for appropriateness. OIT had prepared a draft policy requiring (1) evaluation of system privileges assigned to employees transferring or changing job duties, (2) quarterly assessments of all special or privileged access to systems; and (3) biannual reviews of current user access for appropriateness. However, as of the end of our fieldwork in February 2018, this policy had not yet been formally approved by executive management. 6/5/18 OIT Response: A process is being drafted by Revenue and expected to be complete within 90 days.
Recommendation	Maintain evidence for all users granted access to the databases. When granting access to a consultant, obtain and review the consultant's contract and confirm with the supervising manager that the consultant's access is appropriate. Periodically, database access should be monitored to confirm that all accounts are appropriate, authorized, and supported by a new hire form or active vendor contract [300416.04].	Finalize the draft policy regarding review of user access rights, and work with the impacted departments to complete the required reviews of the active users and their associated access rights for appropriateness [300416.05].
Risk/Potential Effect	Unauthorized access to the database could lead to unapproved or inappropriate database activities and/or direct data table changes.	There is a risk that over time access rights will not be updated due to oversights.
Prior Condition	ACCESS CONTROLS AND SYSTEM FILES 3. Authorization – Database Administrator Access: The OIT was unable to provide evidence documenting the authorization of database access for four IT consultants functioning as database administrators.	4. Periodic Access Rights Review: A process had not been implemented to periodically review active application user accounts, associated access rights, and group membership.

Remediation Status (Complete or Incomplete)	Incomplete: During the current audit, OIT provided us with an evaluation which identified the limitations of the password configurations for the FAMIS, ADPICS, Payroll, Pension Payroll, Health and Welfare, TIPS, and BASIS2 applications. Only BASIS2 had no limitations listed due to the flexibility of its password policy. OIT management informed us that they could make no further enhancements to the password configurations for the other six applications because they were old legacy systems; however, as these legacy systems are replaced, they will address the noted limitations. The first planned systems replacement is the One Philly project, which will replace the Payroll, Pension Payroll, and Health and Welfare systems, and is expected to go live in December 2018. In light of the above factors, we will no longer continue to recommend that OIT evaluate strengthening the password configurations of the FAMIS, ADPICS, Payroll, Pension Payroll, Health and Welfare, and TIPS applications [300413.09]. In future audits, as those systems are replaced, we will evaluate the password configurations of the new systems. 6/5/18 OIT Response: OIT requests that this issue be marked "Completed" per the statements above and reopened if there is an issue with the replacement
Recommendation	Review the available configurations of each authentication point and evaluate strengthening the configuration [300413.09].
Risk/Potential Effect	Inadequate password configurations increase the possibility of multurprized access to the system, micluding malicious or accidental data manipulation or breach of data confidentiality.
Prior Condition	S. Password Configurations: While passwords were required for access to the network, applications, and supporting technologies, configurations could be enhanced to strengthen authentication mechanics. Password configurations were inconsistently implemented and did not always comply with established policies at the network, application, and database levels. The OIT Security group had not performed a review of the financial systems' configurations to evaluate compliance with the established password policy.

Remediation Status (Complete or Incomplete)	Incomplete: OIT management developed a policy which addressed both findings # 6 and 7. Management provided us with a draft policy addressing documentation requirements for the notifications to remove the access rights of terminated employees and inactive users. However, as of the end of our fieldwork in February 2018, the draft policy had not yet been formally approved by executive management. 6/5/18 OIT Response: OIT will look to amending its SysAid ticket closure process to include notation of a review by OIT executive management that will include the Deputy CIO level of administration.	Incomplete: See comments under finding # 6. 6/5/18 OIT Response: See response above.
Recommendation	Institute a policy establishing formal documentation requirements for notifications to remove employee access, including retention of those notifications so they are available for later review and audit [300416.07].	Institute a procedure requiring that automated notifications of terminated employees and inactive users be sent to the Payroll, Pension Payroll, and Health and Welfare application groups and these notifications be retained so they are available for later review and audit [300416.08].
Risk/Potential Effect	Without evidence of notification of termination to management and owners of applications, users may retain access beyond their termination date resulting in the possible unauthorized use of these accounts.	If notification of employee terminations and inactive users is not being sent to management and application owners, the terminated employees and inactive users may retain access, resulting in an increased risk for the unauthorized and inappropriate use of these accounts.
Prior Condition	6. <u>User Administration</u> — Terminated Users: The prior audit noted that, for 12 of 45 terminated employees sampled by us, OIT was unable to provide evidence documenting the notification to management or OIT requesting removal of access rights to the network and in-scope applications. ¹⁵ For all 45 terminated employees sampled, we noted that access to the network and all inscope applications was properly removed.	7. User Administration — Notification of Terminated and Inactive Users: No evidence was provided to document that notifications were being sent to the Payroll, Pension Payroll, and Health and Welfare application groups to inform them of employee terminations and inactive users (i.e. those users who have not signed in to the application for a specified time period).

15 The applications included in our review were FAMIS, ADPICS, Payroll, Pension Payroll, Health and Welfare, TIPS, and BASIS2.

Remediation Status (Complete or Incomplete)	Incomplete: OIT management informed us that they have obtained the impacted city departments' Continuity of Operating Program (COOP) plans, will review them to identify critical IT operations, and then will determine how OIT can support these critical applications. 6/5/18 OIT Response: OIT reviews available COOP plans for IT related functions and advises departments on how OIT can assist in support of continuity of operations.	Incomplete: OIT did not provide any documentation to evidence periodic testing of the plan. 6/5/18 OIT Response: OIT will perform additional research with Revenue IT operations to determine the appropriate
Remedia (Complete	Incomplete: OIT management informed us that they ha obtained the impacted city departments? Continuity of Operating Program (COOP) plans, will review them to identify critical operations, and then will determine how Ocan support these critical applications. 6/5/18 OIT Response: OIT reviews availated to the cooperation of the cooperation.	Incomplete: OIT did not provide any documentation evidence periodic testing of the plan. 6/5/18 OIT Response: OIT will perform additional research with Revenue IT operations to determine the appropriate
Recommendation	Communicate with potentially impacted departments to convey the importance of establishing a business continuity plan. Also, provide guidance and assistance in helping the impacted departments when establishing the plans [300413.13].	Periodically test the BASIS2 disaster recovery plan and document the tests and their results in writing [300413.14].
Risk/Potential Effect	In the event of a disruption of service, city departments may not be able to provide required services or continue limited operations until service is restored.	The disaster recovery plan may not work as anticipated when faced with an unplanned outage.
Prior Condition	8. Business Continuity Plan: A business continuity plan had not yet been developed for the in-scope applications.	9. BASIS2 Disaster Recovery: Testing of the BASIS2 disaster recovery plan had still not been performed.

10. Disaster Recovery Testing: Our review noted a lack of involvement of city departments in the disaster recovery testing. Our review noted a lack of involvement of city departments in the disaster recovery testing. Our recovery place a process in place to recovery process. Out of departments are sufficiently testing their applications, only two departments responded. Bequest the assistance of city departments in departments in place to recovery testing. Our recovery place in disaster recovery testing characterized and in other of a risk that the disaster recovery process. Out of ensure that city departments are sufficiently testing their applications, only two departments responded. Bequest the assistance of city departments are involvement personnel to department personnel to end in order to the city departments sent to the city departments sent to the city departments sent to the city departments are sufficiently to restore during the recovery process. Out of the five departments only two departments only two departments responded. Bequest the assistance of city Gepartment begins in requiring department personnel to anticipate, which could potentially esting [300416.10]. There was some improvement in the level of involvement with three of five city departments departments completed after testing. There was some improvement in the level of involvement with three of five departments and the feedback form. Services in a timely fashion. The covery process out of expert requiring the testing and the feedback form to be completed after testing. There was some improvement in the level of involvement with three of five departments and the feedback form. Services in a timely fashion. The covery planticipate, the testing then that testing all the testing and the feedback form to be completed after testing. There was some improvement in the level of involvement with three of five departments and the feedback form. Services in a timely fashion. The covery planting the timest recovery departments are to the cit		
Testing: With city departments failing to departments in participate in disaster recovery testing. OIT recovery plan may not work as auticipated, which could potentially their applications reduce OIT's ability to restore to not finds, only two ided.	For the most recent disaster recovery testing conducted in November 2017, OIT provided us with various documents sent to the city departments: e-mails informing them that they were required to participate, the testing instructions, and the feedback form to be completed after testing. There was some improvement in the level of involvement with three of five city departments participating in testing, although only two departments completed the feedback form.	6/5/18 OIT Response: OIT conducted testing this year. In addition, OIT facilitated greater participation. We expect to receive results of the recent test in the coming weeks.
Testing: lack of departments in y testing. OIT ess in place to artments are their applications / process. Out of ts notified by OIT tions, only two	Request the assistance of city department heads in requiring department personnel to participate in disaster recovery testing [300416.10].	
10. Disaster Recovery Testing: Our review noted a lack of involvement of city departments in the disaster recovery testing. OIT did not have a process in place to ensure that city departments are sufficiently testing their applications during the recovery process. Out of the five departments notified by OIT to test their applications, only two departments responded.	With city departments failing to participate in disaster recovery testing, there is a risk that the disaster recovery plan may not work as anticipated, which could potentially reduce OIT's ability to restore services in a timely fashion.	
	10. Disaster Recovery Testing: Our review noted a lack of involvement of city departments in the disaster recovery testing. OIT did not have a process in place to ensure that city departments are sufficiently testing their applications during the recovery process. Out of the five departments notified by OIT to test their applications, only two departments responded.	

Appendix II Department of Aviation PROPworks Application Response to Controller's Draft Internal Controls Report Department's Update to Prior Year Findings FYE 6/30/17

PROPworks

Remediation Status

Organizational and Management Controls

IT Policies and Procedures:

<u>Controller's Finding</u>: The DOA had not formally documented its policies and procedures governing critical IT control activities, such as:

- · Specific storage locations for data file backups
- · Periodic testing of backups
- Specific identification of alternative processing facilities in the event DOA facilities are significantly damaged or cannot be accessed
- Detailed instructions of actions to be taken under varying types of contingencies
- · Periodic testing of contingency plan
- Risk assessment and monitoring of security threats

Response:

The Airport has hired a Chief Information Officer to address all Airport IT. Some of the initiatives:

- The Airport has created a number of SOPs previously requested by the Controller's Office. They are in draft and waiting to be fully reviewed and approved by the Chief Information Officer.
- The Chief Information Officer is in the process of reviewing and updating the Airport's IT policies.
- The Airport has taken broader organizational steps to preempt issues such as:
 - In the process of hiring a Chief Information Security Officer to head an independent security group
 - o In process of hiring a Deputy Chief Information Officer for Operations and Infrastructure to replace the IT Director Role
 - Planning to hire an IT auditor that will work outside of IT under the Chief Administrative Officer for the Airport
 - Implementing extensions to OIT policies that are more stringent and airport-specific
 - Enhancing its protocols and procedures with a NIST 800-53-based cybersecurity compliance program

Periodic Review of Access Rights

<u>Controller's Finding:</u> The DOA's written control policy stated that the PROPworks database administrator was responsible for periodic review of user access rights. However, the policy did not address the frequency of this review or the specific steps to be performed. Also, the DOA did not provide any documentation to evidence that a periodic access rights review had been performed.

Response:

The Airport will be hiring a Chief Information Security Officer who will perform periodic reviews of user access rights; this should be in place by FY 2019. Until then, the designated security officer will be performing this review.

Database Administrator's Access Rights and Systems Audit Trails

<u>Controller's Finding:</u> The DOA did not adequately segregate the duties of a consultant who served as the PROPworks database administrator. The consultant, who was responsible for maintaining PROPworks, installing application changes from the vendor, and backing up system data, also granted and removed user access and had the ability to add, change, or delete transaction data and clear system audit trails.

DOA management decided that the database administrator would continue handling the same duties. Management indicated the vendor's recommended protocol is for the database administrator to control user access permissions and asserted that, in the airport's technological environment, it makes more sense for the database administrator to continue performing these duties.

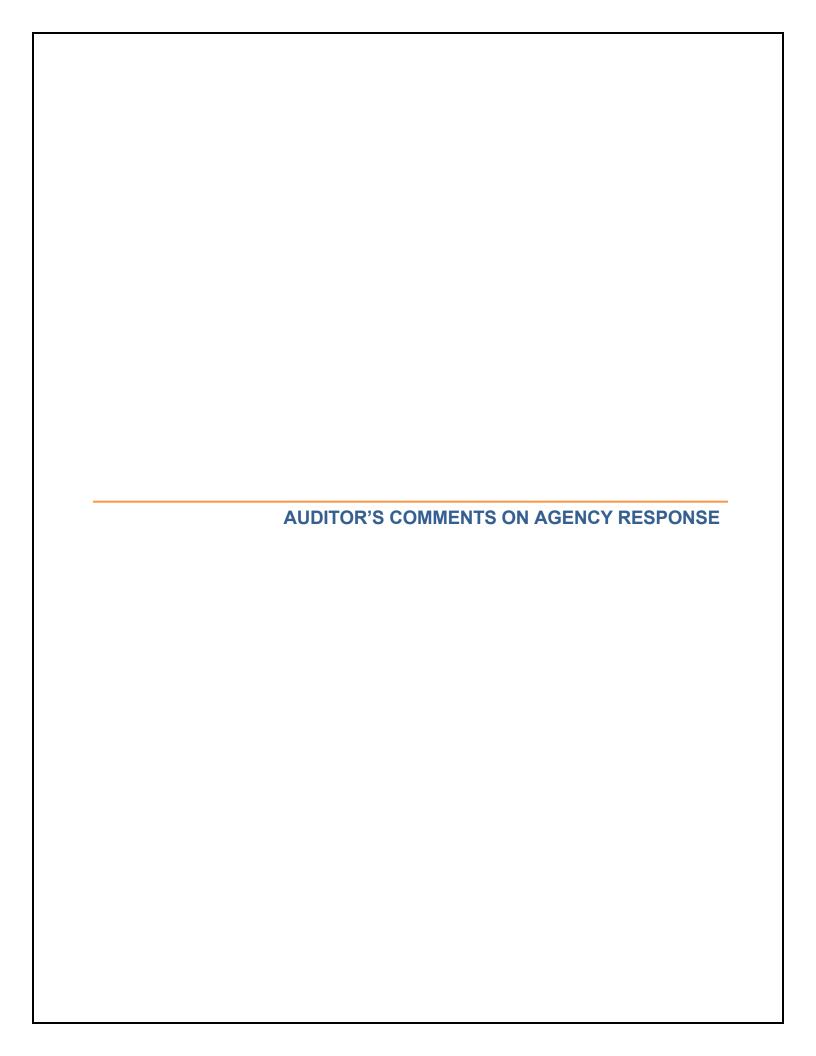
Also, there was no periodic independent review of the system audit trails for unusual activity. Furthermore, the DOA management indicated that the current system audit trails lacked details on the specific data modified by users and adding more detail would require software modifications from the vendor.

In lieu of reviewing audit trails, management indicated they assigned a security officer to periodically monitor activity in PROPworks. However, the security officer did not have access to PROPworks and instead obtained system reports directly from the database administrator, a situation which we believed lessened the effectiveness of the security officer's review.

Response:

As noted last year, Amadeus made software modifications including audit trails, and released a new version of PROPworks with the requested functionality on May 1, 2018. The Airport is currently reviewing and testing the update package and anticipates fully implementing this new version during fourth quarter 2018.

In addition, with the hiring of new and additional staff, the IT unit will be able to segregate these duties and perform the reviews effectively and efficiently.



AUDITOR'S COMMENTS ON AGENCY RESPONSE

Government Auditing Standards require auditors to report instances where the auditee's comments to the auditor's findings, conclusions, or recommendations are not, in the auditor's opinion, valid or do not address the recommendations. We believe this to be the case with certain statements made in the OIT's response regarding programmers' access rights to the Payroll system.

On page 42 to 43 of the report, OIT's response states the following: "The programmer access rights were requested by Finance-Payroll to ensure specific payroll processing tasks were completed during a short time frame where Finance staff were out of the office and experienced OIT staff were determined to be the best substitutes for the process. Access was limited to two programmers, with a full audit trail of actions in place. Permissions were revoked when the tasks were completed."

Our current year testing did reveal that no programmers had the Payroll system authority level (i.e. level 4) normally only assigned to the Finance Office's Central Payroll Unit management. However, on pages 18 to 19 of the report, we noted that three programmers still had the ability to enter payroll transactions and approve departments' bi-weekly payrolls. This report finding was based upon documentation supplied by OIT management in December 2017. As of our audit opinion date of February 23, 2018, OIT management had not provided any documentation to evidence the removal of the three programmers' access rights. Additionally, when we met with OIT management on April 18, 2018 to discuss the report findings, they did not indicate that the three programmers' access rights were removed or provide any related support.