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**CITY OF SAN ANTONIO**  
**OFFICE OF THE CITY AUDITOR**



Audit of Finance Department

Citywide Payroll

Project No. AU20-011

September 29, 2021

Kevin W. Barthold, CPA, CIA, CISA  
City Auditor

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## Executive Summary

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As part of our annual Audit Plan approved by City Council, we conducted an audit of the Finance Department, specifically citywide payroll processing. The audit objectives, conclusions, and recommendations follow:

**Determine if internal controls are in place to ensure payroll processing is accurate.**

We determined that the design of the City's payroll process is adequate; however, the City can further improve SAP user access within the payroll process.

SAP has various levels of security, one of which is the modification of access privileges based on transaction codes and user roles. During the period under review, we found excessive user access for payroll transactions, lack of documenting compensating controls or alternative procedures where the separation of duties is impractical, and lack of semi-annual user access reviews. As a result, there is a risk that users with excessive access privileges may perform erroneous or fictitious transactions resulting in financial loss to the City.

We recommend that the Deputy CFO:

- Remove excessive user access privileges prohibiting the ability to modify employee information and process payroll.
- Resume the examination and documentation of compensating controls, or alternative procedures where the separation of duties are impractical to ensure they are properly in place and operating effectively.
- Resume the performance of SAP user access reviews on a semi-annual basis and modify SAP access accordingly to ensure access complies with the least privileged principle.

Finance Department Management agreed with the audit findings and has developed positive action plans to address them. Management's verbatim response is in Appendix B on page 6.

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## Background

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The City of San Antonio employs more than 12,000 employees across 38 departments who provide a wide range of municipal services. Labor Services, a group within the Finance Department, oversees the processing of payroll disbursements.

Within Labor Services, the Time and Attendance Manager ensures that employee time is entered accurately and timely prior to the process of payroll. Concurrently, the Payroll Manager runs reports to assist in the identification of potential payroll errors to include employee time, position funding source, employee status, employee claims, or other fringe benefits with set limits. The Payroll Manager coordinates with the appropriate personnel for correction before finalizing payroll.

Labor Services administers four payroll areas: Bi-weekly Civilian, Bi-weekly Uniform (Police and Fire Departments), Bi-weekly Temporary, and School Crossing Guards which are processed monthly. The total payroll amount for calendar year 2020 was approximately \$575 million. See table below for a breakdown by payroll area.

**Table 1: Calendar Year 2020 Payroll Totals**

Payroll Area	Direct Deposit (in \$)	Direct Deposit Count	Physical Check (in \$)	Physical Check Count
Bi-weekly Civilian	\$ 281,461,742	232,870	\$ 3,527,197	2,830
Bi-weekly Temporary	1,552,160	4,538	238,991	812
Bi-weekly Uniform	285,349,882	132,774	1,509,480	261
Monthly School Crossing Guards	904,170	1,740	15,371	36
<b>Totals</b>	<b>\$ 569,267,954</b>	<b>371,922</b>	<b>\$ 5,291,039</b>	<b>3,939</b>

### SAP Access Security

SAP is an enterprise resource planning (ERP) software that creates a centralized system to manage financial and employee records. SAP has various levels of security, one of which is the modification of access privileges based on transaction codes and user roles.

Transaction codes allow users to perform an action or activity within SAP, such as initiating payroll payments or modifying employee personal information. Transaction codes are assigned to user roles, and roles are subsequently assigned to end users. End user access privileges may be customized through the modification of restrictions within transaction codes, thus reducing the City's risk exposure.

## Audit Scope and Methodology

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The audit scope included payroll transactions between September 2019 and December 2020 excluding the Fire and Police Departments.

We interviewed staff management and key staff to obtain an understanding of the payroll process. Testing criteria included City Administrative Directives.

We relied on computer-processed data in the SAP, the City's accounting system, to validate financial information. Our reliance was based on performing direct tests on the data rather than evaluating the system's general and application controls. Our direct testing included comparing extracted payment information against supporting documents such as payroll journals and employee master data. We do not believe that the absence of testing general and application controls had an effect on the results of our audit.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Audit Results and Recommendations

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### A. Security Access Rights

User access for the processing of payroll and employee master data are not appropriately restricted. In addition, Finance does not examine compensating controls and perform semi-annual user access reviews.

#### A1. Excessive User Access Privileges

Access to Employee Master Data, Time Recording and Payroll Processing are not appropriately restricted. Specifically, two employees within the Labor Services group have access to maintain employee master data such as employee name, physical and mailing address, bank details, basic pay in addition to rights to process payroll and approve time. Furthermore, one active civilian user within the Labor Services group has excessive access to modify time. *Administrative Directive 7.8D Access Control* states, "Access permissions will use the principle of least privilege. All other access requires justification and approval." These segregation of duties violations and lack of mitigating controls to prevent and detect inappropriate payroll transactions could result in misappropriation of assets.

#### A2. Examination of Compensating Controls

During the period under review, Finance Compliance and Resolution (C&R) did not examine compensating controls on a test basis to verify they are in place, enforced and effective as stated in the *SAP Production Access Procedures*. Compensating controls are alternative procedures established to mitigate risk where the segregation of incompatible duties is not practical. For example, where users require the access to modify both HR and payroll data, an additional independent review of changes can compensate for the lack of segregation of duties.

Currently, the expected compensating controls to mitigate the segregation of duties conflicts may not be in place as written or operating effectively due to limited staff after the emergency redeployment during FY2020.

#### A3. Performance of Semi-Annual Reviews

During the period under review, a semi-annual review of SAP user access was not performed by Finance. Per the *SAP Production Access Procedures*, each department is required to review its processes and access for current and former Department users semi-annually to ensure continued segregation of duties. However, due to limited staff resources after emergency redeployment during FY2020, Finance was unable to perform detailed user access reviews at the role level.

Due to the lack of compensating control testing and semi-annual user access reviews, there is a risk that users with excessive access privileges may perform erroneous or fictitious transactions resulting in financial loss to the City.

### **Recommendations**

The Deputy CFO should:

*A1. Remove Excess User Privileges* - Remove excessive user access privileges by role prohibiting the ability to modify basic pay, employee name, employee address, employee time, and process payroll.

*A2. Examine Compensating Controls* - Finance C&R should maintain a central list of all segregation of duties conflicts with the corresponding compensating controls and select controls on a test basis to ensure they are in place and operating effectively.

*A3. Perform Semi-Annual Reviews* - HR and the Labor Services of the Finance Department should perform SAP user access reviews on a semi-annual basis to ensure access complies with the least privileged principle and segregation of duties are in place and recommend departments modify SAP roles accordingly.

## Appendix A – Staff Acknowledgement

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Gabe Treviño, CISA, Audit Manager  
Judith Flores, CPA, Auditor in Charge  
Caitlin Loomis, CPA, Auditor  
Ken Lyssy, CFE, Auditor

# Appendix B – Management Response



## CITY OF SAN ANTONIO

SAN ANTONIO TEXAS 78283-3966

August 23, 2021

Kevin W. Barthold, CPA, CIA, CISA  
City Auditor  
San Antonio, Texas

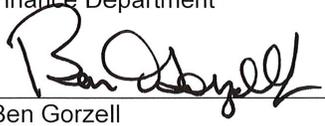
RE: Management’s Corrective Action Plan for Audit of Finance Citywide Payroll

The Finance Department has reviewed the audit report and has developed the Corrective Action Plan below corresponding to the report recommendation.

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person’s Name/Title	Completion Date
A1	<b>Excessive User Access Privileges</b> Remove excessive user access privileges prohibiting the ability to modify employee information and process payroll.	3	Accept	Melanie Keeton, Assistant Finance Director	December 31, 2021

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
	<p><b><u>Action plan:</u></b></p> <p>The Finance Department has historically modified the master data to issue checks to beneficiaries on behalf of deceased employees upon receiving authorization and approval from Human Resources and Legal. That duty required Finance Labor Service employees to have access to change employee master data. As the primary change in master data for beneficiary payments is to the address field, we ran an exception report for FY2020 and FY2021 for the Finance Labor Service employees to check whether these employees performed master data changes to either create a new employee, change banking information, or modify base pay, noting no changes were made to either create employees or change salary. One of the employees did use her access to modify banking information for two employees. The change to the banking information was properly authorized at the direction of the Human Resources Department.</p> <p>Finance is working with Human Resources to transition the duties of updating all master data, to include beneficiary checks and ensuring sufficient back-up coverage within Human Resources so that this access can be removed from our two employees.</p> <p>When the Payroll Manager was promoted from her previous Time and Attendance Manager position, the roles associated with entering time were not removed in order to provide coverage while the previous position was being filled.</p> <p>Finance has removed the excess time access roles from the Payroll Manager and implemented a policy to review all Payroll and Time roles annually; and upon transfer, promotion, or separation of employees within the division to ensure proper access going forward. We additionally ran a report for FY2020 and FY2021 to ensure the employee did not approve her own leave and only approved leave for her direct reports' time, noting no issues.</p> <p>All Central Access roles for payroll and time are being reviewed for validation or removal of access for all City Employees in accordance with management response to this audit A3.</p>				
<b>A2</b>	<p><b>Examination of Compensating Controls</b></p> <p>Resume the examination and documentation of compensating controls, or alternative procedures where the separation of duties are impractical to ensure they are properly in place and operating effectively.</p>	<b>3</b>	Accept	<p>Melanie Keeton, Assistant Finance Director</p> <p>Russell Huff, Assistant Director</p>	December 31, 2021

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
	<p><b><u>Action plan:</u></b></p> <p>Occasionally due to resource constraints resulting from vacancies, transfers, employee absences, or department funding for sufficient positions, compensating controls may need to be implemented to ensure operations within the department continue to function. When conflicting roles are requested by departments, they are reviewed and approved by the Department Fiscal Administrator (DFA) and a compensating control document is provided along with the role request to Finance for review and approval.</p> <p>Finance's Compliance and Resolution (C&amp;R) Division receives Compensating Control requests and, if approved by the Assistant Finance Director, will authorize the roles. C&amp;R would spot check that the compensating control indicated was in fact being followed during their various department reviews undertaken throughout the year. All department reviews were put on hold during FY2020 and FY2021 due to the temporary redeployment of C&amp;R staff to the Emergency Housing Assistance Program, where they provided needed operational support to ensure applicants claims were process and paid expeditiously. C&amp;R returned to Finance in May 2021 and has been working on developing its review plan effective for FY2022.</p> <p>Finance's C&amp;R Division along with the Accounting Division will review all existing compensating control documents, update, or remove access as necessary, and better document the alternative procedures in place. C&amp;R will additionally incorporate the testing of these compensating controls in their FY2022 reviews.</p>				
<b>A3</b>	<p><b>Performance of Semi-Annual Reviews</b></p> <p>Resume the performance of SAP user access reviews on a semi-annual basis and modify SAP access accordingly to ensure access complies with the least privileged principle.</p>	<b>3</b>	Accept	<p>Melanie Keeton, Assistant Finance Director</p> <p>Russell Huff, Assistant Director</p>	December 31, 2021

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
	<p><b>Action plan:</b></p> <p>Finance's C&amp;R Division is responsible for providing role access in SAP to fiscal employees based on forms approved by DFAs and rulebook owners. C&amp;R has additionally assisted the Accounting Division with semi-annual user access reviews by providing the users' access roles for department review and approval. With the redeployment of this division to the Emergency Housing Assistance Program where they processed client applications for payment, and the re-prioritization of work assignments by the DFAs and their fiscal divisions throughout the City during FY2020 and FY2021 responding to and addressing COVID-19 impacts in their departments and to their customers, the semi-annual reviews normally performed were not conducted during the pandemic.</p> <p>Finance will resume the semi-annual role access review, by generating user reports by roles and sending these reports to the DFA for validation. Additionally, the DFAs will coordinate with C&amp;R to run conflict reports for any of their employees to ensure that there are existing compensating controls or if not, prepare new ones.</p> <p>Finance will additionally re-establish its Approva Task Force to continue the SAP Rulebook reviews to ensure the roles issued to employees appropriately include the proper transactions and related access. Finance acquired Approva several years ago as a tool to assist in our review of SAP user-access roles. Approva uses pre-defined, configurable business rules to uncover user access risks and informs the appropriate decision makers with reports and alerts whether users may have excessive or conflicting access to roles. Finance created the Approva Task Force, which consisted of individuals within the Accounting Division, C&amp;R, ITSD and Rulebook owners, to review and configure the business rules to the City's operations. This Task Force's goals will include finalizing the rulebook roles, create a new SAP role access approval check list, and develop generic roles by position.</p>				
<p>We are committed to addressing the recommendation in the audit report and the plan of action presented above.</p> <p>Sincerely,</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">               _____              Troy Elliott              Deputy Chief Financial Officer              Finance Department         </div> <div style="width: 45%; text-align: right;">             09/22/2021              _____              Date         </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%;">               _____              Ben Gorzell              Chief Financial Officer              City Manager's Office         </div> <div style="width: 45%; text-align: right;">             9/24/2021              _____              Date         </div> </div>					
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