

Travis County SAP Access Review

16-20

September 20, 2017

TRAVIS COUNTY
AUDITOR'S OFFICE

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From: Nicki Riley, CPA
Travis County Auditor

Date: September 20, 2017

Re: Travis County SAP Access Review # 16-20

The Risk Evaluation and Consulting Division (REC) of the Auditor's Office has performed a limited examination of user system access to the Financial System (SAP) for the period of August 1, 2016 to June 30, 2017. The overall objectives of this review were 1) to require office and department management to review SAP user access for each of their employees, 2) to review SAP business roles and security assignments, and 3) to determine if controls are adequate to restrict SAP Financial System access and processing capabilities to each employee's duties and responsibilities.

SCOPE OF EXAMINATION

The scope of this review included a limited examination of system access to the SAP Financial System to determine that all employees with SAP access are current employees of Travis County or have valid authorization to have access and to verify compliance with internal policies and procedures. In addition, we evaluated controls over functions responsible for handling and managing office/department access to SAP for the period of August 1, 2016 to June 30, 2017.

EXAMINATION METHODOLOGY

To assess the risks associated with the County's environment and infrastructure for SAP, we obtained a broad understanding of current processes related to SAP access. This understanding was obtained through interviews with personnel, reviews of applicable documentation, and observations of the process. In addition, requests for updated SAP user access approvals were sent

to each management team to determine that system access was consistent with job roles and applicable internal controls.

Our work was also based on applying sampling procedures and other information systems testing. The use of these techniques would not necessarily disclose all areas of concern related to system security and associated internal controls. In regard to the written and verbal representations made by the various offices and departments being reviewed, unless otherwise noted in this report, office and department management maintains that the assertions we relied upon in this review were correct to the best of their knowledge.

EXAMINATION TEAM

Enrique Barroso, CIA, CISA, Senior Auditor
John Gomez, D.B.A.

CLOSING

This report is intended solely for the information and use of Travis County, and it is confidential pursuant to Government Code 551.076 Security Audits; Government Code 418.183 Disclosure of Certain Information; and Government Code 418.181 Confidentiality of Certain Information Related to Critical Infrastructure.

We greatly appreciate the cooperation and assistance received from management and staff throughout Travis County during this review. Please contact our office if you have any concerns or questions regarding this report.



David Jungerman, CIA
Chief Assistant County Auditor – Risk
Evaluation & Consulting Division



Patti Smith, CPA
First Assistant County Auditor



Nicki Riley, CPA
Travis County Auditor

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Managers, Travis County Auditor's Office

BACKGROUND/RESULTS

Travis County began actively using the Financial and Procurement modules of SAP in June, 2012 and the Payroll and Human Capital modules in January, 2013. In an enterprise resource planning (ERP) system like SAP, data from the Finance, Procurement, Human Capital, and Payroll modules is incorporated into the overall general ledger. The SAP general ledger provides the functionality required to generate financial statements and other reports and schedules, manage the County's cash flow and fixed assets, and track payables and receivables.

System access:

Access to SAP is based on "business roles" which determine the level of access an employee is assigned. In SAP, an individual may be assigned one or more business roles that grant access to different modules in the system. The security protocols related to these business roles are determined by the "security roles" attached to each business role.

Each security role gives users the ability to perform certain functions within the system. Security roles help properly secure sensitive business information and maintain proper segregation of duties. Typically, a number of security roles are attached to a business role; each business role is then assigned to either a position (slot) or person (employee). From a security perspective, when a security role is assigned to a position, anyone filling that position will automatically receive that security role, unless a request to change their access is submitted.

SAP access is not granted or modified unless the request is made by a user with the appropriate SAP Role Request Authorization; Role Request Authorizations represent the individuals that have been authorized by the applicable official to make changes to SAP access for their office or department.

Internal controls related to system access:

In requesting security roles, offices and departments are instructed to follow the concept of segregation of duties. Segregation of duties is an internal controls concept intended to prevent system users from performing incompatible duties, like creating and approving their own journal entries. In the following two cases, we noted SAP access levels that are not in compliance with proper segregation of duties; the first is being eliminated and mitigating controls have been implemented for the second:

1. *Access to enter and approve shopping carts* - We noted that 194 users have the ability to both create shopping carts for the purchase of goods or services and approve those Shopping Carts without additional supervisory review. The SAP Support Division is currently working to eliminate this access level by October 1, 2017.
2. *Timesheet approval issue* - Some employees that report directly to an elected or appointed official have been delegated the responsibility of reviewing and approving their entire office's timesheets, including their own. In order to mitigate the control weakness created by this level of access, the SAP Support Division has created an exception report detailing users that have approved their own timesheet. The Auditor's Office Payroll Division reviews this report each pay period for unusual activity.

Department Responses:

During our review, a total of 44 SAP Access Review Representation Letters were sent to offices/departments having SAP Access as of November 15, 2016. These letters included requests for review and approval of assignments of business roles for office/department employees with SAP access. This request included a report listing the employee name, assigned role(s), position number and title for each party with system access. We also included a separate report with a description of each the business role. The summary of these responses follows:

Response Type	Number of Responses	Percentage of Responses
Representation Letters returned signed without exception	20	45.5%
Representation Letters returned signed with access changes	22	50.0%
No Responses	2	4.5%
Total Representation Letters	44	100.0%

We examined in detail the 22 representation letters upon which changes in access were requested. In 13 instances, personnel in the applicable offices had already properly submitted a help desk ticket requesting the applicable changes. The remaining requests were routine in nature, and we forwarded them to the SAP Support Group for follow-up. The Travis County Sheriff's Office and Travis County Human Resources Management Department did not respond to our representation letters. For these entities, we performed alternative procedures to review their system access including employment verification and job description reviews.