

SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA



ITEM: 2.7
(ID # 15388)

MEETING DATE:
Tuesday, June 08, 2021

FROM : AUDITOR CONTROLLER:

SUBJECT: AUDITOR-CONTROLLER: Internal Audit Report 2021-010: Riverside County Transportation and Land Management Agency, Building and Safety Audit, All Districts. [\$0]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Receive and file Internal Audit Report 2021-010: Riverside County Transportation and Land Management Agency, Building and Safety Audit

ACTION: Consent

Tanya Harris
Tanya Harris, Assistant Auditor Controller 6/2/2021

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Washington, seconded by Supervisor Spiegel and duly carried by unanimous vote, IT WAS ORDERED that the above matter is received and filed as recommended.

Ayes: Jeffries, Spiegel, Washington, Perez, and Hewitt
Nays: None
Absent: None
Date: June 8, 2021
xc: Auditor

Kecia R. Harper
Clerk of the Board
By: *[Signature]*
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,
STATE OF CALIFORNIA**

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$ 0	\$ 0	\$ 0	\$ 0
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0
SOURCE OF FUNDS: N/A			Budget Adjustment:	No
			For Fiscal Year:	N/A

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

In accordance with Board of Supervisors Resolution 83-338, we completed an audit of Riverside County Transportation and Land Management Agency, Building and Safety to provide management and the Board of Supervisors with an independent assessment of internal controls over application controls.

Please see report for audit results.

Impact on Residents and Businesses

Provide an assessment of internal controls over the audited areas.

Additional Fiscal Information

Not Applicable

ATTACHMENT A: Riverside County Auditor-Controller's Office - Internal Audit Report 2021-010: Riverside County Transportation and Land Management Agency, Building and Safety Audit.


Stephanie Perez, Principal Management Analyst 6/2/2021

Internal Audit Report 2021-010

**Riverside County
Transportation and Land Management
Agency, Building and Safety
Audit**

Report Date: June 8, 2021



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**ACO | AUDITOR
CONTROLLER
COUNTY OF RIVERSIDE**

**Paul Angulo, CPA, MA
Riverside County Auditor-Controller**

**Tanya S. Harris, DPA, CPA
Assistant Auditor-Controller**

June 8, 2021

Charissa Leach
Assistant County Executive Officer
Riverside County Transportation and Land Management Agency, Building and Safety
4080 Lemon Street, 9th Floor
Riverside, CA 92501

**Subject: Internal Audit Report 2021-010: Riverside County Transportation and Land
Management Agency, Building and Safety Audit**

Dear Ms. Leach:

In accordance with Board of Supervisors Resolution 83-338, we completed an audit of Riverside County Transportation and Land Management Agency, Building and Safety to provide management and the Board of Supervisors with an independent assessment of internal controls over application controls.

We conducted our audit in accordance with the International Standards for the Professional Practice of Internal Auditing. These standards require that we plan and perform the audit to obtain sufficient, reliable, relevant and useful information to provide reasonable assurance that our objective as described above is achieved. An internal audit includes the systematic analysis of information to evaluate and improve the effectiveness of internal controls. We believe this audit provides a reasonable basis for our conclusion.

Internal controls are processes designed to provide management reasonable assurance of achieving efficiency of operations, compliance with laws and regulations, and reliability of financial and non-financial information. Management is responsible for establishing and maintaining adequate internal controls. Our responsibility is to evaluate the internal controls.

Our conclusion and details of our audit are documented in the body of this audit report.

**Internal Audit Report 2021-010: Riverside County Transportation and Land
Management Agency, Building and Safety Audit**

As requested, in accordance with paragraph III. C of the Board of Supervisors Resolution 83-338, management responded to each reported condition and recommendation contained in our report. Management's responses are included in the report. We will follow-up to verify that management implemented the corrective actions.

Paul Angulo, CPA, MA
Riverside County Auditor-Controller



By: René Casillas, CPA, CRMA
Chief Internal Auditor

cc: Board of Supervisors
Jeffrey A. Van Wagenen Jr., County Executive Officer
Grand Jury

**Internal Audit Report 2021-010: Riverside County Transportation and Land
Management Agency, Building and Safety Audit**

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Executive Summary

Overview

Riverside County Transportation and Land Management, Building and Safety department (Building and Safety) is responsible for providing construction permits related to services such as grading, building plan checks, front counter assistance, and inspections. Building and Safety also collects fees and conducts building inspections, ensuring construction in the county is safe, accessible and code compliant. Building and Safety has an adopted budget of \$9.1 million for FY 2020-21 and has 47 authorized positions to execute its responsibilities *County of Riverside, Fiscal Year 2020-21 Adopted Budget, 327*.

Audit Objective

Our objective is to provide management and the Board of Supervisors with an independent assessment about the adequacy and effectiveness of internal controls over application controls (Control activities over information systems used by TLMA staff). Internal controls are processes designed to provide management reasonable assurance of achieving efficiency of operations, compliance with laws and regulations, and reliability of financial information.

Audit Scope and Methodology

We conducted the audit from October 28, 2020, through May 3, 2021, for operations from July 1, 2018, through March 8, 2021. Following a risk-based approach, our scope initially included the following:

- Application controls monitoring
- Field inspections monitoring
- Permit fees process

Through inquiry, observations, and examination of relevant documentation related to field inspection monitoring and permit fees process, we concluded that internal controls over these areas are sufficient to mitigate the risk we initially assessed in these areas. As such, we focused our audit scope to internal controls over application controls.

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Audit Highlights

Summary of Existing Conditions

- Public Land Use System accounts for employees no longer with the department are not disabled timely. Disabling system user accounts is an internal control designed to prevent former employees from obtaining or changing system information. Additionally, not disabling system user accounts provides an opportunity for other employees to abuse the former employee's login credentials to obtain access rights beyond their own.

Summary of Improvement Opportunities

- Establish policies and procedures for the immediate disabling of user access rights for terminated or transferred employees.
- Ensure compliance with County of Riverside Information Security Standard v1.0, Section 4.1, *Account and Access Management*, by disabling Public Land Use System user system accounts on the day of an employee's termination or transfer from the department.

Audit Conclusion

Based upon the results of our audit, we identified opportunities for improvement of internal controls relating to user access rights to department systems. Specifically, Building & Safety does not have a process in place to immediately disable user access rights.

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Application Controls

Background

Public Land Use System (PLUS) is the land management system (LMS) utilized by Riverside County Transportation and Land Management Agency (TLMA) to assist in the planning and permitting process as well as tracking permits, inspections, approvals, and fee payments. TLMA upgraded to PLUS in 2017 to replace the existing LMS. PLUS is a web-based application which allows access via a network connection rather than being stored within a device's memory. Web-based applications typically run inside a web browser which gives user the ability to access the system from anywhere so long as they have the appropriate login credentials.

Active Directory is a directory service which allows Riverside County Information Technology Department (RCIT) to manage permissions and access to network resources, and linked systems such as PLUS. When a user ends employment with a county department, RCIT is notified to disable Active Directory to remove permissions and network access.

Application controls within information systems ensure proper confidentiality, integrity, and availability to the data stored within the system. Authentication is a control which confirms a user's identity to provide access to a systems sensitive information. Sensitive information is any information that must be protected from unauthorized access to maintain the information security of an organization or an individual. Authentication is often done using login credentials such as a username and password. Authentication relies on the fact that the user is authorized to use the system and that only the user knows the login credentials to gain access.

Objective

To verify the existence and adequacy of internal controls over information system used by Building and Safety.

Audit Methodology

To accomplish these objectives, we:

- Obtained an understanding of applicable standards.

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- Conducted interviews and performed walk-throughs with department's personnel.
- Performed testing on all terminated employees for the review period, totaling 21.
- Confirmed whether terminated employees had access to the PLUS system.
- Verified if PLUS system users were disabled in a timely manner.
- Reviewed PLUS system user profile access to determine if adequate segregation of duties exist.
- Verified whether PLUS user access rights were documented and adequately approved.

Finding 1: Untimely Disabling of User Access Rights

PLUS system and Active Directory accounts were not disabled in a timely manner for employees no longer with the department. Furthermore, records were not maintained to adequately monitor user access right requests submitted to RCIT to mitigate the risk of unauthorized access. We identified the following in our review of 21 terminated employees:

- 14 (67%) PLUS system user accounts were not disabled within 24 hours of the employee terminating employment with the department. The disabling of the user accounts ranged between 21 days and 107 days after the employee had ended employment. In addition, 5 (24%) PLUS user accounts are currently active after the employees ended employment with Building and Safety. County of Riverside Information Security Standard v1.0, Section 4.1, *Account and Access Management*, states, "Accounts for terminated or transferred employees shall be disabled or removed on the day of termination or transfer."
- 20 (95%) Active Directory employee termination requests submitted to RCIT could not be provided by department. Furthermore, RCIT was able to provide 11 Active Directory employee termination requests. We identified 6 of 11 (55%) employee termination requests were not submitted timely to RCIT. The employee termination requests ranged from 5 days and 331 days after the employee had ended employment with Building and Safety.

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The current processes for disabling terminated/retired employees PLUS user access and Active Directory should be strengthened. When an account is not closed immediately after employment has ended, there is a security risk to the information maintained in the systems used by the department.

Recommendation 1.1

Establish policies and procedures to ensure immediate disabling of user access rights for terminated or transferred employees as required by County of Riverside Information Security Standard v1.0, Section 4.1, *Account and Access Management*.

Management's Response:

"Do not concur. While it is apparent the termination of user rights is an area that needed better oversight, a policy is in place. The TLMA Resource Center provides an Employee's Departure Checklist & Guideline Form which is utilized for all employees that are no longer employed with the Department."

Actual/estimated Date of Corrective Action: "Currently in use"

Recommendation 1.2

Ensure compliance with County of Riverside Information Security Standard v1.0, Section 4.1, *Account and Access Management*, by requesting the disabling of user system accounts on the day of an employee's termination or transfer from the department.

Management's Response:

"Partially Concur. While using the TLMA Employee's Departure Checklist & Guidelines form has been consistent, in some cases the timing of providing the notification would appear to have lagged: however there is no mention of a 24 hour time frame and in the Audit response it is no referencing same day notification, clarification of the expected time frame is requested: same day or 24 hours?"

Auditor's comments:

County of Riverside Information Security Standard v1.0, Section 4.1, *Account and Access Management*, requires accounts be disabled on the day of an employee's termination or transfer. Our review found the department's largest lapse in days in disabling user

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accounts were 107 days and 331 days for PLUS and Active Directory, respectively. The large delay in disabling accounts is a significant departure from disabling accounts on the "same" day or within "24 hours. Also, it is important to note that during our testing, five employees who were no longer employed by Building and Safety, had active user accounts in PLUS. This emphasizes the need for management to improve their monitoring procedures required by the Information Security Standards that are available and accessible to all county departments.

Actual/estimated Date of Corrective Action: "24 hours: Feb 25, 2021"

Recommendation 1.3

Establish policies and procedures for following up with RCIT on employee termination requests to ensure that user access rights are disabled timely.

Management's Response:

"Partially concur. While records of notifications have been inconsistent, a new direction is to be in place. The proposed policy as follows: Once an employee leaves the Building Department, the applicable manager/Supervisor will create a ticket directly to the RCIT system.

That ticket/tracking # is noted within the TLMA Employee Departure Checklist & Guidelines form, which I sent the TLMA Resource Center, which files the form in the employee file (HR), where the record is kept.

Moving forward, RCIT will provide a monthly PLUS "active user" report to TLMA Admin for review to ensure compliance."

Actual/estimated Date of Corrective Action: "Current discussions with the RCIT, TLMA Admin, Building Department & Counter Services representatives scheduled and expect implementation within 30 days (May 31, 2021)."