

Highlights

Internal Audit Report to the Board of Supervisors

Countywide Data Centers and Disaster Recovery

71% of Data Centers Controls Were Operating Effectively

Why We Did This Review

Data centers house the vital computer equipment that contains mission-critical information systems and data essential to County operations. End-users, such as accounting clerks who process citizen transactions, view data centers as operating in the background. However, when data center services become unavailable, significant and costly problems can occur.

We visited 27 data center sites and reviewed 82 important control points at each site in order to verify:

- 1) Are County data centers adequately protected from threats to physical security, including the data center environment, data backup and recovery, sensitive processing equipment, and day-to-day operations?
- 2) Does the County have well defined plans to adequately restore the operation of critical information systems following a disaster?

What We Recommended

Fourteen individual agency reports containing a total of 433 improvement recommendations were sent to IT management and their directors for response.



For more information, please contact Eve Murillo, Deputy County Auditor, at 602-506-7245 or emurillo@mail.maricopa.gov

What We Found

The County earned a passing score: audit results showed 71% of the 2,025 controls tested operate as intended. Here are results by category:

Control Category	% Operating Effectively	% Needing Improvement
Physical Security	69%	31%
Environmental	67%	33%
Backup and Restoration	82%	18%
Equipment Protection	81%	19%
Data Center Operations	72%	28%
Disaster Recovery Planning	40%	60%
OVERALL RESULTS	71%	29%

Agencies Already Applying Best Practices

We found that several organizations had already implemented some best practice controls, and six others proactively implemented best practice solutions based on our recommendations before audit close. Several more organizations have solutions in progress.



Flammable clutter was removed from a data center per our recommendation

Conditions Could Improve With Policies and Standards

Most of the audit findings stemmed from either a lack of policies, procedures, and standards for data center and disaster recovery-related controls or a lack of funding or optimal space to house data centers. While funding constraints may not be lifted soon, many IT organizations expressed interest in collaborating to establish County guidelines and best practices.

We appreciate the excellent cooperation received from participating management and staff while conducting this audit.

“Do the Right Things Right!”

Maricopa County Internal Audit Department