

# Audit at a glance

## Outdated Infrastructure – Zoo

JULY 2025

### ABOUT

We completed a risk assessment of technology in several city agencies, resulting in this planned audit. This audit assessed the zoo's management of technology approaching or having reached the end of its life — including examining the zoo's strategies for outdated technology management and evaluating the timing and extent to which systems were maintained to reduce the risk of outdated technology.

### KEY FACTS

The Denver Zoo Conservation Alliance's Information Technology team provides IT support and services to an 80-acre campus with over 2,500 animals, almost 400 staff, 600 volunteers, the board of governors, the leadership council, and nearly two million visitors a year.



## In the report

### **FINDING: The Denver Zoo Conservation Alliance is managing the risk of outdated infrastructure, but processes can be improved**

- The Denver Zoo Conservation Alliance's Information Technology team is proactively identifying, reporting, budgeting, and replacing its outdated infrastructure and is committed to providing IT users a secure and modern IT environment to allow the zoo to innovate. To do so, it is tracking and monitoring its inventory, identifying IT equipment before it has reached end of life, reporting end-of-life equipment to leaders through its budgeting process, replacing older equipment as needed, and properly disposing of the equipment.
  - Although we found the zoo proactively monitors and identifies IT equipment that is approaching end of life, we also found some areas of improvement. We found:
    - It is tracking and monitoring its IT equipment; however, the completeness and accuracy of the IT equipment inventory can be improved.
    - Its IT asset policy needs updating to define outdated infrastructure and its risk acceptance procedures.
  - We found the zoo has 882 pieces of IT equipment comprising computers, mobile devices, network equipment, servers, and other IT devices. We examined the equipment and found 13 instances of outdated infrastructure or 1.3% of the total number of items. The 13 items were being appropriately risk managed and the uses were low risk or were appropriately controlled.
- The Denver Zoo Conservation Alliance is tracking and monitoring its IT equipment, but inventory processes can be improved**
- We selected a sample of 25 pieces of equipment to determine whether the items listed in the zoo's inventory are physically present at the location listed in the inventory. We visited the zoo and were able to locate all 25 samples at various locations around the zoo.

### WHY IT MATTERS

**IT hardware and software needs updating to help organizations innovate and use technology to better serve its stakeholders. When vendors stop supporting the product, the product is not provided with security updates or spare parts, which may allow bad actors to perform cyberattacks.**

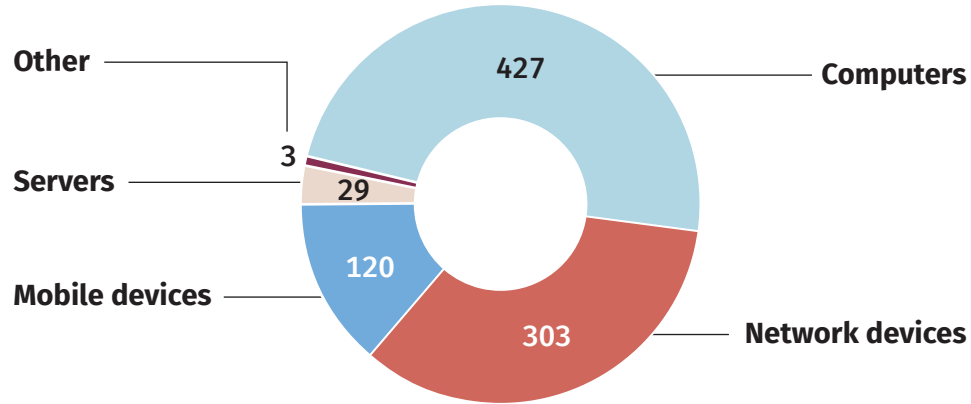
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## POPULATION OF IT EQUIPMENT AT THE DENVER ZOO CONSERVATION ALLIANCE



Source: Created by Denver Auditor's Office staff.

- In addition, we reviewed the IT equipment inventory for completeness by judgmentally selecting 25 pieces of IT equipment during our site visit and verified the 25 pieces of IT equipment existed in the IT inventory. We found one of the 25 samples we selected did not have a corresponding record in its inventory. This was a mobile device that did not have the required software to communicate with the management software.

**The Denver Zoo Conservation Alliance should update the process for how the risk of outdated infrastructure is accepted**

- The Denver Zoo Conservation Alliance has an IT asset policy that provides guidance

on identifying, tracking, maintaining, and disposing of IT equipment. When we reviewed the policy, we found it does not define what would constitute support no longer being available from a vendor.

- Additionally, the zoo's policy does not include guidance on how the risk is accepted for outdated infrastructure that remains in use.
- Because the zoo's IT team is small, it may not require the same level of documented policies as a larger more complex organization. However, we believe these definitions will help improve consistency in the process and prevent knowledge loss in the event of staff turnover.

## POPULATION OF IT SUPPORTED AND UNSUPPORTED EQUIPMENT AT THE DENVER ZOO CONSERVATION ALLIANCE

	CURRENTLY SUPPORTED	AT END OF LIFE
Operating systems	531	2
Mobile devices	117	3
Network equipment	300	3
Servers	24	5
Other	3	

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