

Name: City Cloud Infrastructure

Completed: Fiscal Year 2024/2025

Goal Alignment:

RESILIENT - Deliver viable IT solutions that are dynamic, scalable, and maintainable.

INNOVATIVE - Transform the City's service delivery through new and creative solutions.

Summary:

The City previously operated three separate IT environments, each supporting essential departmental functions: Police, Fire, and general City Enterprise departments. Although these environments shared a physical datacenter, they each had their own secondary datacenter in a different location. Each environment had its own hardware systems, software licenses, support contracts, and maintenance schedules, using very different architectures with minimal configuration similarities. Additionally, separate teams of staff were dedicated to supporting each environment.

The City Cloud project aimed to modernize and streamline the delivery of platforms designed to empower the next generation of applications and services for Sacramento's employees, citizens, businesses, and other stakeholders. This was accomplished by consolidating the datacenter infrastructure of all three environments into a single, unified private cloud environment. Each environment hosted by the City Cloud functions as a tenant, utilizing a portion of the shared pooled resources.

Benefits:

- Efficient use of resources
 - Leverage economies of scale to get better pricing
 - Less total hardware, software, and support purchased
 - Reduction in power and cooling consumption
 - Employee time spent engineering, deploying, and maintaining is reduced by nearly two-thirds.
 - Reduction in cross-city fiber optic cable runs need for base connectivity
- Improved resiliency
 - Re-purpose cross-city fiber optic cable runs to improve resiliency
 - Leverage cost savings to ensure all equipment has redundancies
 - Enhance the redundancy of connections to peer organizations (e.g., County).
 - Unified level of resiliency across all tenants
- More secure
 - All servers are now behind a firewall
 - Datacenter equipment utilizes out-of-band management
 - Infrastructure components not susceptible to compromised domain user accounts
- Future forward
 - Easily and efficiently scalable
 - Ready to host modern applications, designed for automation.