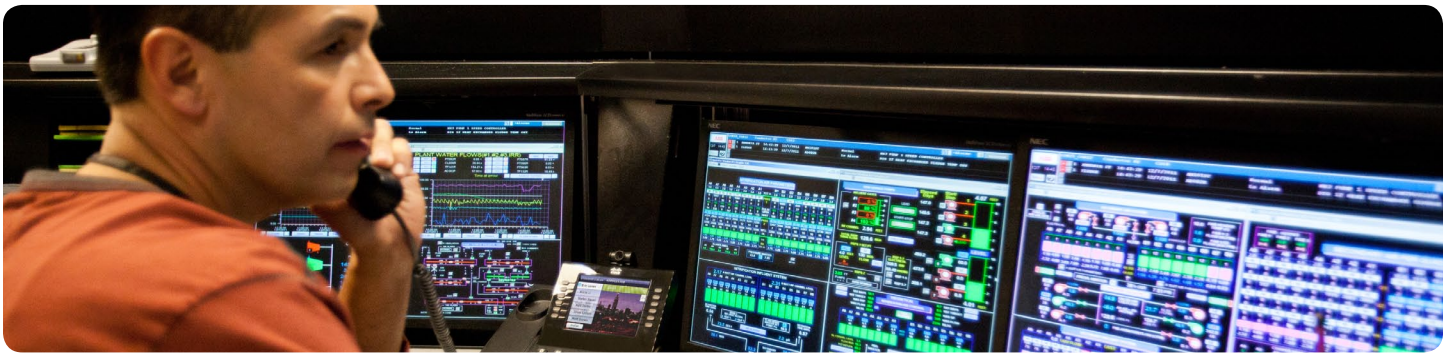
Customer Case Study

# City Improves Network Agility and Cuts Complexity



## Executive Summary

- **Customer Name:** City of Hayward
- **Industry:** Government
- **Location:** Hayward, California
- **Number of Employees:** 850

### Business Challenge

- Updating network switching infrastructure to achieve greater scalability
- Gaining additional value from hardware investments
- Reducing network infrastructure and administrative costs

### Network Solution

- Cisco Nexus 5500 and 2200 Series Switches deliver Fiber Channel and Fiber Channel over Ethernet (FCoE) with compact form factor

### Business Results

- Reduced in-rack cable counts by more than 70 percent
- Eliminated complexity, reducing total number of network switches by more than 50 percent
- Lowered total cost of ownership (TCO)

### Technology Partner

- ExtraTeam, Certified Gold Technology Partner

## City of Hayward uses Unified Fabric technology to simplify network infrastructure and management.

### Business Challenge

California's economy has placed extrordinary pressure on local governments to tighten their budgets, streamline and reduce costs wherever possible, without affecting services. This pressure extends downward to local municipalities such as the City of Hayward, whose IT department faces growing demand for services while budgetary resources recede.

Located in the East Bay of the San Francisco Bay Area, the City of Hayward has a population approaching 150,000 and is the third largest city in Alameda County. The city's network provides vital technology support to its onsite and remote staff, as well as a number of important community services for the city's residents. The important role that the network infrastructure plays in government's ability to support its constituents is not a casual consideration.

The City of Hayward's network is the hub of all activities that keep it moving forward. From mission-critical public safety systems, traffic and utility controls, communications, and applications with a variety of devices for onsite and remote workers to helping ensure local citizens have access to vital services and information, the network runs 24 hours a day to meet demand. As demand has grown and technology continuously evolves, the administration realized its infrastructure was at risk of becoming outdated and complex, which was making it too costly to scale, let alone maintain.

"Today we have a simplified network infrastructure. The Cisco Nexus 5500 and 2200 Switches are the lynchpin of the project, a perfect technology solution that produces solid business benefits and better scales with us as we grow."

– **Clancy Priest**
Chief Information Officer
City of Hayward

"Like many public sector organizations, we constantly face doing more with less," says Clancy Priest, chief information officer at the City of Hayward. "In our case, 'less' became an important objective as part of the project, because we needed to update and simplify our network in order to lower costs. Our infrastructure had too many dedicated and individual servers and components that, over time, had become too difficult and costly to manage."

The City of Hayward began looking for an answer that would result in a network capable of scaling the services and applications to more effectively support staff and the public. At the same time, the city needed a streamlined solution to reduce complexity and cost, enabling the city to focus its budget and resources on other critical projects.

## Network Solution

Cisco Nexus® 5500 and 2200 Series Switches provided a proven platform to accomplish exactly what the City of Hayward needed: new technology that would update and simplify its infrastructure and result in overall sustainability. The Nexus 5548UP switch offered all the standard features expected in a data center network switch, including high performance Layer-3 routing, in a compact form factor offering a high density of 10 Gigabit ports.

A major differentiator of the Cisco® Nexus 5548UP for the City was its universal port capabilities, handling either native Fiber Channel or Ethernet and Fiber Channel over Ethernet (FCoE) technology, which enabled the City to converge the data center infrastructure. At the same time, Cisco Nexus technology helped consolidate the compute and application network with the storage network through a switch with high port density, significantly reducing network complexity. Additionally, by implementing Nexus to connect the disparate array of dedicated servers and replace the older switching devices, the City of Hayward can substantially reduce its hardware and cabling requirements, producing significant cost savings.

Certified Gold Technology Partner, ExtraTeam (www.extrateam.com) provided the technology solution plans, design, and deployment services for the City of Hayward. ExtraTeam's solution, using the Cisco Nexus 5000, created an infrastructure for the City of Hayward that would serve its growth needs well over the next several years and lower the total cost of ownership.

## Business Results

Corporations measure success using tangible metrics that demonstrate improvement. Government operations are no different, perhaps even more stringent given public visibility and scrutiny. The City of Hayward identified clear technology imporvements and financial objectives that it needed to achieve, while delivering more applications and services to employees and constituents.

Using the Cisco Nexus Series Switches to converge the data and storage networks improved how the network is managed and created a robust, more compact architecture that was very efficient. Streamlining the network traffic onto a single, flexible platform has improved the network's overall performance and enabled the City of Hayward to handle its existing load and boost capacity. The change transformed the total network footprint into a smaller configuration that required less space, power, and cooling.

## Product List

### Routing and Switching

- Cisco Nexus 5548UP Switches
- Cisco Nexus 2200 Series Switches

The City has also been able to reduce the number of network switches required in its environment to deliver new services and applications by more than 50 percent, as well as reduced in-rack cabling by more than 70 percent. In turn, the streamlined solution helped to simplify administration and cut costs to scale its infrastructure.

"Today we have a simplified network infrastructure," says Priest. "The Cisco Nexus 5500 and 2200 Series Switches are the lynchpin of the project, a perfect technology solution that produces solid business benefits and better scales with us as we grow. Now, our network is delivering better services to employees and the public, as well as reduced our overall operating costs."

As future demand grows, the City of Hayward is able to add new applications and devices, expand services to wired and wireless users, scale storage needs intelligently, and efficiently manage the network within budgetary constraints.

## For More Information

To find out more about Cisco Unified Fabric, go to: www.cisco.com/go/uf.
To find out more about Cisco Data Center Switches, go to: www.cisco.com/go/nexus.



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