# CITY OF REDONDO BEACH

**Upgrading the network for Redondo Beach, CA to meet new user demands and support advanced applications**

**Project:**
Reliable, high-performance network upgrade

**Challenges:**
Provide reliability to critical public-safety applications
Provide a higher lever of service with fewer resources
Support user demand for advanced applications

**Value Created:**
Improved public safety
Easier network management
Future-proofing for new technology

**Lean IT department handles growing demand for reliable, high-performance network infrastructure.**

Redondo Beach, California: The City of Redondo Beach is a laid-back, family-oriented beach town with a population of 67,000 and a reputation for strong schools and an appealing quality of life. While on the surface a relaxed Californian lifestyle characterizes the community, behind the scenes, the city's IT department has been busy updating its network infrastructure to support the 'do-morewith-less' staffing model that many local governments and state agencies are turning to as a result of shrinking budgets.

"Our challenge in Redondo Beach is resources versus demand for services," explains Chris Benson, Information Technology Director for the City of Redondo Beach. "Budgets are tight in the state of California and we're feeling the effects of cuts in staff and resources. But the demand for technology is steadily rising. We have to figure out ways to keep up with the demand without additional staff."

One strategy is the City's recent Avaya data network upgrade, implemented by Black Box, that provides the reliability and bandwidth to meet the needs of the City of Redondo Beach today and into the future.

## Meeting the Demand

The Redondo Beach data network covers three primary sites, including the city hall, police station, and fire station, as well as 12 smaller remote sites. It supports fourteen City departments, including public safety, public works, recreation and community services, human resources, financial services, and elected officials, each with its own distinct mission.

"Our end users are very tech savvy," says Benson. "For everything they want to do, there's a technology out there to help them do it better, and they want it."

The consumerization of technology represents a significant challenge for IT departments such as Redondo Beach's. "We have to do things that enable us to support all of this technology without having to be constantly 'hands-on' with it," observes Benson.

Redondo Beach chose Avaya for its network solution based on its reputation for stability, the enabling capabilities of its Fabric Connect technology, and the ease of training staff to use network administration tools.

## Trusted Partners

Once the city had selected Avaya for its network infrastructure, Benson was mindful that he needed an IT system integrator with a solid depth of experience deploying and supporting the Avaya product line.

Black Box was chosen due to its expertise in designing, implementing, and maintaining high-performance communications solutions, plus Benson's previous positive experience working with the company. Black Box provided support and project management for an earlier successful deployment of Avaya unified communications for Redondo Beach.

"Black Box fit the criteria I was looking for," says Benson. "The phone system upgrade went without a hitch. That gave me a high level of confidence in the company and their ability to execute." "I can't take big risks, especially with a mission-critical project and an expenditure of this size," comments Benson. "Failure in a network implementation means downtime, which means everybody stops working. When I decided to work with Avaya and Black Box on this project, I was confident they could deliver." Black Box deployed Avaya Ethernet Routing Switch 8800 systems, Ethernet Routing Switch 4850 Series products, and the Fabric Connect technology. Since the deployment, Fabric Connect has eliminated time-consuming tasks that previously required dispatches of technicians to remote locations to undertake manual configuration routines.

The deployment was completed ahead of schedule, with two additional locations being upgraded per week, well within scheduled outage windows.

"There was great preparation by Black Box in getting a parallel network built and functional before we deployed," says Benson. "Black Box and Avaya stepped up to the plate and took care of any issues that came up. I can't ask for much more than that."

"The Black Box project management was excellent, and was key to the success of the project," says Benson.

## A Connected City

As part of the network upgrade project, the City also refreshed its Wi-Fi infrastructure, rolling out Wi-Fi to the local Performing Arts Center as well as other facilities.

"Mobility is everything now. We're trying to meet that need in places like the Performing Arts Center," says Benson. "When people walk into a business, a conference, or an event, wireless connectivity is an expected service."

The City has plans to revitalize its harbor area. Benson fully anticipates the City Council will ask for Wi-Fi at locations in that area. With its previous aging wireless network, IT would have been hard-pressed supporting any type of expansion. Now, they are in the position to accommodate this and other future Wi-Fi needs

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### Reliable Network and Public Safety

Public safety is the IT department's largest 'customer.' Police department technologies that rely on the Avaya network include license plate recognition, mobile data computers (MDC) in vehicles, on-person video, connections to state and national databases, and the dispatch center supporting 911 calls.

"Our public-safety users are relying on this technology in such a mission-critical way that the more sound and stable a network infrastructure we can offer, the better service they can provide to the community," says Benson. "We provide them with reliable service and connectivity due to the robust nature and stability of the network we have in place. This means they don't have to deal with sudden outages, extended downtime, sites going up and down, or unreliable service."

"The residents, business owners, and visitors of Redondo Beach have significant expectations for excellent customer service from public safety, and the Avaya systems provide a robust, secure, and reliable network to provide that service," says Joe Leonardi, the Police Chief. "The Police and Fire Departments answer up to 100,000 calls for service each year. More than 95% of these calls are answered in six seconds or less. Many of these calls are routed by telephone providers to our business lines in addition to the 9-1-1 circuits."

"It is essential," Leonardi added, "that our Voice-over-IP telephone network is dependable and available 24/7 without interruption." "This recent major network upgrade involved the replacement of 43 switches and two core routers," comments Leonardi. "The IT Department advised us to anticipate telephone interruptions over a period of up to four hours. These conservative, worst-case scenario estimates never occurred, and outages were reduced to 30 minutes or less. When systems don't work properly, everyone knows the name of the products that causes the failure. Few officers would know what or who Avaya is—because it has not failed."

### Saving Time, Providing Better Service

"One of the biggest benefits we're seeing from the Avaya network upgrade is time savings," says Benson. "Our very lean IT staff now has more time to spend on other things because we're spending considerably less time managing the network."

For example, extending networks across multiple switch stacks or to a remote site is a fairly common occurrence for the Redondo IT team. Before the upgrade, this could take up to one to two hours, and now it takes less than five minutes. "I recently had to extend the network out to a fire station for a video conferencing application. All I had to do was add the appropriate VLAN on that end and it was done," recounts Benson.

"Our users at remote sites receive the same level of service they would get here at City Hall, and it's very easy for us to deliver that service." The City was able to start enjoying the benefits of its new network sooner than planned, as the deployment finished ahead of schedule. "We were able to complete more installs in a shorter period of time than originally anticipated. Everything went in very well. I attribute that to the great preparation that Black Box did before the deployment," says Benson.

### About The City of Redondo Beach

Redondo Beach is a full-service city with its own police, fire, and public works departments, two public libraries, a performing arts center, fifteen parks, a large recreational and commercial harbor including King Harbor, a 1,500-slip private craft port; the Redondo Beach Pier and Seaside Lagoon; and a bathing and surfing beach.

Located in the choice coastal edge of Los Angeles County, just twenty miles from downtown Los Angeles and seven miles south of Los Angeles International Airport, Redondo Beach has been a resort destination for more than a century.

As of January 2010, the Census reports a total population of 66,748. As of Fiscal Year 2011-12 the City employs a workforce of 434 full-time equivalent positions.

*Black Box is a leading technology solutions provider dedicated to helping customers build, manage, optimize, and secure their IT infrastructure. Black Box delivers high-value products and services through its global presence and over 4,000 team members. To learn more, visit the Black Box Web site at www.bboxservices.com.*

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