

**CASE STUDY**

# Elevating the Airport Experience: Consulting Services Improve Cybersecurity and Business Operations at Los Angeles World Airports

International airports require regular maintenance, facilities upgrades and a strong security apparatus. After winning the 2028 Olympics, Los Angeles is overhauling LAX to improve customer experience, cybersecurity, business operations and IT.



## Challenge

Los Angeles Municipal Airport, originally known as Mines Field, began operating under the city's Department of Airports on Oct. 1, 1928. Nearly 100 years later, Los Angeles will serve as the host city for the 2028 Summer Olympics.

Since 1928, the airport — now Los Angeles International Airport (LAX) — has grown from 640 acres to nearly 3,000 acres of runway, hangars and terminal buildings. It is the second-busiest airport in the United States and the fourth-busiest in the world. This airport is one of three aviation facilities owned and operated by Los Angeles World Airports (LAWA).

## Project Stats

### Client

Los Angeles World Airports

### Location

Los Angeles, California

# 100+

**TASK ORDERS  
SUCCESSFULLY DELIVERED**

# 39%

**OF PROJECT PARTNERS  
WERE DISADVANTAGED  
BUSINESS ENTERPRISES**

# 55

**LAPTOPS LOANED TO  
LAWA DURING COVID-19  
STAY-AT-HOME**

The airport and region have grown over the past century. Similarly, the technologies, infrastructure, rules, regulations and business practices for the aviation industry have changed. The information technology (IT) systems throughout LAWA play a critical role in successful business operations. Whether it's implementing automated badging systems, mitigating cybersecurity risks, addressing noise concerns or preparing for major sporting events — such as the 2026 World Cup or the 2028 Summer Olympics — IT is interwoven into every facet of operations.

Throughout LAWA, the IT department has its key staff to address day-to-day concerns, but special projects to improve services across the airport require a knowledgeable, reliable and accessible partner. Working in close collaboration with LAWA, we are addressing IT and business operations concerns to elevate these world class facilities before the World Cup kickoff in 2026.

## Solution

In 2017, LAWA awarded a three-year contract to Burns & McDonnell to provide IT project controls and technical support services. After successfully delivering an array of projects through the IT On-Call and Project Management Office (PMO) program, LAWA provided an annual extension of services through 2023.

Our team provides IT project control services, which include administrative support for LAWA's IT operations and capital improvement projects, including estimating, scheduling, change order management, status and financial reporting, and cost controls. Technical support services include design and operational support for various IT, security and business operations systems. Throughout this contract, our team has accepted more than 100 task orders to assist with various airport projects.

The subsequent projects reflect some of the top IT, asset management and business operations priorities of LAWA. This list includes project details, including information related to airport needs, project solutions and objectives, and potential outcomes:

- **Developed the LAWA Noise Portal webpage to address noise concerns from citizens related to flight patterns.** This interactive webpage gives residents of the Los Angeles metro the ability to view flight pattern information so they can better understand why there is increased flight noise on a current day and in a specific neighborhood. Residents are also able to submit questions, concerns and complaints regarding flight patterns. This information is mapped out to make sure flights are within Federal Aviation Administration

(FAA) regulations. The LAWA Noise Portal enhances transparency with residents and facilitates flight pattern improvements to meet FAA standards.

- **Provided procurement and implementation support for the LAWA identity management and credential system, and badging system.** The identity management and credential system, as well as the badging system, provide the necessary security and information technology apparatus to support security systems for employees throughout the airport. LAWA has card readers and access control systems integrated throughout its airports and facilities. Upgrading a badging system also requires updating the identity management system and access control system. Finally, these two systems must also be integrated. Through the implementation of this project, LAWA will have enhanced security to meet Transportation Security Administration and Department of Homeland Security guidelines, and to support the traveling public.
- **Provided systems design and IT project management support for a trial program to establish a biometric automated self-boarding system.** The goal of this initiative is to streamline the passenger experience from arrival at the airport to takeoff. Passengers have their picture taken, which serves as a biometric asset. Biometric scanning devices will use the snapshot of the passenger's face to create a seamless process, limiting the number of human interactions. After passing through security, an individual would not need to have a ticket scanned or bags checked by another person. By simply putting luggage on the carousel and walking through the gate, the passenger will be departing with less friction and more ease.
- **Provided direct project controls support to LAWA's Project Management Office.** Our team provided day-to-day management of task orders, the budget, scheduling projects, resource management and project closure. During the COVID-19 pandemic, LAWA required additional support to maintain a high-quality level of service. Our project controls support helped LAWA bridge the gap to remain on schedule for its capital improvement programs.
- **Provided cybersecurity consulting.** While LAWA has a strong cybersecurity culture, the evolving threats posed by nefarious actors require vigilance and continuous improvement. The team at Burns & McDonnell provides consulting services to prioritize enterprise security and the development of a security operations center (SOC). Working with LAWA on its enterprise security, we established the requisite policies and procedures to maintain data confidentiality and integrity. Our team also

helped to enhance the SOC, which serves as a unified division to address security issues. An SOC is necessary to strengthen an organization's security through people, processes and technology. During the COVID-19 pandemic, more staff chose to work remotely and fewer people were willing to work on-site. Vulnerabilities increased due to staff using virtual private networks off-site and fewer people wanting to work at the airport. We identified opportunities to automate systems in the SOC so cybersecurity can remain robust regardless of whether employees are on-site or working remotely.

- **Conducted owner's commissioning support and LAX terminal operational readiness services.** As with any major airport, terminals will be renovated and new terminals will be built. Our team provided commissioning services to inspect equipment and facilities at renovated terminals to verify proper installation. Similarly, terminal operational readiness is necessary after a terminal is renovated or built. During terminal operational readiness, our team tested and addressed concerns before terminals opened to the public, confirming equipment, systems and facilities were prepared.
- **Designed and implemented network infrastructure to support the Landside Access Modernization Program.** In preparation for the 2028 Olympics, LAX needed a monorail or train system to dissipate traffic away from the airport, while providing direct transportation services to parking, car rental services and nearby hotel accommodations. LAX is building its electric train system with six stations — three located outside the central terminal area (CTA) and three inside the CTA. Our job was to help car rental agencies build their new central location outside of the main hub for LAX. This will help pull people away from the busy terminals while centralizing car rental options. Setting up the new car rental locations also improves customer experience, as the train will provide a more reliable and consistent service when compared to shuttles.

- **Managed multiple contracts for LAWA's internet technology programs.** Working with local and small businesses, we were able to provide program management and design oversight for network infrastructure updates, intelligent transportation systems, the IT help desk, emergency response radio communication systems, identity management, badging, and physical security systems. These various IT systems have enabled LAWA to implement an enhanced security posture while improving the customer experience throughout its terminals.

## Results

Since 2017, Burns & McDonnell has delivered an array of projects under its IT On-Call and Project Management Office programs. This partnership has elevated LAWA's IT systems, customer service, business operations, facilities management and cybersecurity.

As Los Angeles gears up for the 2028 Olympics and as a host city for the 2026 FIFA World Cup, these steps to improve security, business operations and customer experience are critical to demonstrate to the world that Los Angeles is a wonderful place to live, work and play. Providing a quality space for business and leisure travelers is a critical step to attract tourists and maintain strong economic growth.

## About Burns & McDonnell



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