

# SWARCO McCain HAWAII

## FEATURED DEPLOYMENT

## ISLAND OF OAHU

SWARCO McCain's Omni eX® Intersection Control Software seamlessly integrates with Oahu's existing intersection controllers

### OVERVIEW

The project team, including many partners, will modernize HDOT's infrastructure by deploying MyCity Traffic Management Software (TMS) to help all stakeholders proactively monitor, control, and analyze traffic congestion. The project team will also deploy Omni eX Intersection Control Software on HDOT's existing ATC controllers and update Adaptive algorithms at select locations to adapt to traffic patterns throughout the day.

### LOCATION

Oahu is Hawaii's third-largest and most populated island. With the island being just 44 miles from end to end, you can easily incorporate Oahu's many sites and activities with short daytrips. It has a population of 995,638, with 81% of those living in or near the Honolulu urban area.

### THE CHALLENGE

With its aging traffic system infrastructure, the Hawaii Department of Transportation (HDOT), in cooperation with the City and County of Honolulu, was in need of modernizing its infrastructure to meet the needs of the island of Oahu. Their investment will ensure a sustainable solution to meet their short and long-term needs, while focusing on reducing traffic congestion and improving safety in high-tourist areas of the island.

### SOLUTION

The island of Oahu has 1,000 traffic signals that rely on 30-year-old hardware and software. This system is at the end of its lifecycle and needs replacement. As the Hawaiian Islands' largest transportation and economic center, Oahu is more densely populated than the other islands. The infrastructure is deteriorating and requires upgrades to meet the safety challenges projected for 2025. Given the island's substantial growth and influx of tourists, particularly from the Honolulu airport to Waikiki Beach, there is an increasing need for an improved traffic management system.

HDOT sought a solution that could ensure interoperability with their existing traffic controllers. It required software that would seamlessly operate within their current traffic network, and SWARCO McCain, in partnership with Phoenix Pacific, was the one who could deliver that solution. Of the 1,000 signals on the island, 255 of the existing traffic controllers would fluidly run SWARCO McCain Omni eX software. All 255 signals would undergo timing conversions from the old 233 firmware to the new Omni eX firmware. 118 of the 255 controllers, which were previously running an old QuicNet central traffic system, would be entirely replaced with the MyCity Adaptive central system. SWARCO McCain would provide quarterly training and support on the new local and central software throughout the transition.

### BENEFITS OF OMNI eX

- Provides a single solution for any controller/cabinet configuration
- Complies with national industry standards including NEMA, ATC, and NTCIP
- Supports a 16-line screen with simultaneous display of status and menus
- Ensures data accuracy and consistency with built-in data validation