SWARCO McCain

CALIFORNIA



SWARCO McCain's comprehensive traffic management solutions modernize Culver City's traffic infrastructure, improving city-wide efficiency and traffic adaptability

OVERVIEW

In a collaborative partnership, SWARCO McCain played a crucial role in transforming Culver City's traffic management system. SWARCO McCain implemented modern and future-ready traffic management solutions and intelligent transportation systems (ITS) to modernize the city's traffic management and infrastructure, improving city-wide efficiency with adaptability to changing traffic patterns.

LOCATION

Culver City is located in the Los Angeles metropolitan area. Major highways, Interstate 10 and Interstate 405, feed commuters in and out of the city with the help of major arterial roads. Due to its prime location, coupled with these major highways, Culver City is a critical hub in the greater Los Angeles area's transportation landscape.

THE CHALLENGE

Culver City relied on legacy systems and controllers that were becoming obsolete and less compatible with modern ITS solutions. Major challenges with its traffic management arose during the pandemic; the city's transportation system was affected by a drastic reduction in travel time, leading to free-flowing traffic conditions in many previously congested intersections. To accommodate the drastic changes in traffic flow, the city needed to implement adaptive signal control capabilities to monitor and manage traffic flow efficiently.

SOLUTION

The solution included the deployment of the SWARCO McCain MyCity TMS¹ and the installation of 106 McCain 2070LX Controllers featuring adaptive traffic capabilities. Additionally, SWARCO McCain implemented new signal timing plans at 102 intersections by deploying SWARCO McCain's MyCity Adaptive² system. This seamless solution also included the integration of SWARCO McCain's Omni eX® Intersection Control Software for customizable options in the city's traffic management system and adaptability to the evolving ITS solutions.

KEY DELIVERABLES OF THE DEPLOYMENT

- ATC Controllers offered remote monitoring and access to a webbased interface
- Omni eXIntersection Control Software facilitated interoperability and interchangeability with the ATC platform
- · MyCity TMS improved traffic flow and enhanced efficiency
- MyCity Adaptive provided automated traffic signal performance measure (ATSPM) reports

THE RESULTS

After adopting SWARCO McCain's comprehensive solutions and switching to the ATC platform, Culver City enhanced its traffic system efficiency, utilizing remote monitoring and adaptive technologies to manage and streamline intersection congestion.

The ATSPM reports revealed a 15% increase in arrival on green and improved platoon ratios, indicating increased throughput without dramatically increasing split percentages with adaptive coordination. The adaptive solution effectively solved the city's challenge with its fluctuation in traffic volumes, where the typical coordination patterns would not have been appropriate and would have incurred unnecessary side street delays. SWARCO McCain's comprehensive solutions adjusted to the lower traffic volumes, reducing the need for manual interventions or schedule modifications due to the system's remote and adaptive capabilities.

