

SWARCO McCain ARIZONA

FEATURED DEPLOYMENT

CITY OF CASA GRANDE

Implementation of MyCity Adaptive¹ improves arrival on green performance and signal timing efficiency along critical corridor in Casa Grande, AZ

OVERVIEW

The city of Casa Grande, AZ is a major transportation hub. It is the only community in the state of Arizona directly served by two main interstate freeways, I-8 and I-10. Florence Boulevard is one of the main corridors in the city and was identified as a candidate for traffic improvements.

LOCATION

Casa Grande is located in central Arizona, about halfway between Phoenix and Tucson, at the junction of Interstates 10 and 8. Florence Boulevard in Casa Grande is a key roadway in the Arizona Innovation and Technology Corridor (AZITC). The corridor is home to many technology manufacturers, such as Lucid Motors. The corridor is currently the focus of some of the most exciting green-energy development projects in the nation.

THE CHALLENGE

A total of eight locations were in need of traffic improvements; Florence Boulevard and Trekell Road on the West and Florence Boulevard and Henness Road on the East. Additionally, there was a need for an adaptive solution for three locations on Peart Road, a crossing arterial that is a major feeder into Florence Boulevard. Goals included improvement of throughput and progression on Florence Boulevard as well as implementation of detection and communication upgrades to modernize the traffic system on this stretch of Florence Boulevard.

SOLUTION

The project included traffic controller upgrades, detection upgrades, communications upgrades, and a central software upgrade with Signal Performance Measures (SPM) reporting and adaptive functionality. SWARCO McCain provided McCain ATC eX2 NEMA Controllers running McCain Omni eX[®] Intersection Control Software as well as MyCity² with MyCity Adaptive across 11 locations. Casa Grande chose this system to accommodate its projected rapid growth in population.

BENEFITS OF MYCITY ADAPTIVE

- Adjust to real-time traffic demand
- Reduce stops, delays, and travel time
- Analyze arterial performance with high-resolution data reports

THE RESULTS

SWARCO McCain, along with their distribution partner Clark Transportation Solutions, completed a post-installation analysis in October 2022. The analysis used the high-resolution, SPM data collected through the newly implemented MyCity Adaptive and discovered that enhanced system yielded the following results³:

- Eastbound and Westbound traffic improvements on Florence Boulevard and Peart Road
- Average Arrivals on Green Performance: + **65.85%**
- Average Green Time Efficiency: + **109.52%**
- Average Arrivals on Green Performance: + **38.39%**
- Average Green Time Efficiency: + **52.72%**



¹Formerly known as Transparency[®] Adaptive

²Formerly known as Transparency TMS

³Data collected from the most critical intersection of the project, Florence Blvd and Peart Rd