

SWARCO McCain FLORIDA

FEATURED DEPLOYMENT

HIGHLANDS COUNTY

SWARCO McCain MyCity Adaptive¹ Solution helps Highlands County, FL reduce traffic congestion along major highway in hurricane threatened area

OVERVIEW

Highlands County partnered with SWARCO McCain and Transportation Control Systems to provide dynamic signal timing software to meet the needs of its region's ever-changing and unpredictable traffic volumes. SWARCO McCain's MyCity Adaptive software provided the optimal solution to manage their complicated signal network. The SWARCO McCain software solution adjusts the operation of intersections in real time, responding to changes in traffic and maximizing throughput on the corridor while minimizing wait times for side street vehicles.

LOCATION

Highlands County is in the Florida Heartland region, which is managed by Florida Department of Transportation (FDOT). As of the 2020 census, the population was 101,235. This area is often threatened by hurricanes during the 6 month-long Atlantic hurricane season.

THE CHALLENGE

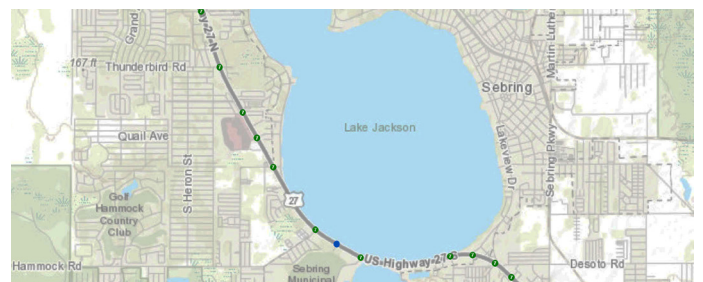
Highway 27 is a major highway, carrying thousands of vehicles through Highlands County per day. The county's current timing plans on this highway were not keeping up with unexpected peaks in traffic volume, and as a result, travel times on the road were poor. The system was also unable to respond to sudden changes in traffic patterns such as a road closure that requires a detour.

SOLUTION

McCain ATC eX[®] NEMA Controllers, complete with McCain Omni eX[®] Intersection Control Software, were installed at 14 intersections along Highway 27. All 14 controllers are connected through MyCity Adaptive software, a system that adjusts signal timing and coordinates movements along a signalized corridor based on real-time data in an effort to reduce congestion and improve the flow of traffic. No longer working independently, the 14 controllers respond to unexpected traffic volume by increasing the green times of the impacted movements and optimizing offsets between intersections to allow for improved coordination and fewer delays. The cloud based system is easily managed by FDOT in Manatee County.

BENEFITS OF MYCITY ADAPTIVE

- Adjust to real-time traffic demand
- Reduce stops, delays, and travel time
- Reduce signal timing engineering efforts and prolong timing effectiveness
- Analyze arterial performance with high-resolution data reports



Map showing hurricane threatened area

MYCITY ADAPTIVE IN ACTION

In September 2022 Hurricane Ian caused the water level of Lake Jackson to rise, causing an entire section of Highway 27 to be under water. Thanks to the implementation of the SWARCO McCain solution, traffic was redirected, and a detour was quickly and successfully established from Highway 27 at Flair Road to Hammock Road.

¹Formerly known as Transparency[®] Adaptive