



The Setup

A 34 mile stretch of State Road 520 (SR520) in Brevard County, Florida, experiences a daily average of 37,000 commuters traveling to the beaches, shops, and attractions off Interstate 95 in Cocoa Beach. Seasonal fluctuations in tourism throughout the year cause unpredictable surges in traffic on SR520, increasing travel times and delays. Local businesses are concentrated around five major junctions, causing significant choke points and heavy congestion. To further complicate traffic flow, SR520 serves Brevard County as a critical hurricane evacuation route. Brevard County deployed SynchroGreen[®] Real-Time Adaptive Signal Control Technology (ASCT) to keep their cities moving and support the local economy.

SynchroGreen is a revolutionary, software-based ASCT that collects traffic data at signalized intersections, analyzes the data for changing trends, and adjusts traffic signal timing in real-time based on the current demand.

SynchroGreen collects and analyzes intersection traffic data and adjusts traffic signal timing in real time.

Project Objectives

- Reduce arterial travel time
- Reduce arterial delay
- Better accommodate seasonal traffic
- Provide an effective traffic solution for hurricane evacuations

Updated Intersections

100

Delays Reduced By As Much As

81%

Reduced Travel Time By As Much As

35%

The Solution

By calibrating and simulating the SynchroGreen databases prior to the implementation of the SR520 project, Brevard County was able to complete the project in just four months.

SR520 saw notable improvements in the morning with travel times reduced by up to 35 percent for both east and westbound traffic; delays were reduced by up to 81 percent for eastbound travelers and 78 percent for westbound travelers.

Brevard County's ATMS expansion project involving the installation of SynchroGreen at over 100 intersections is one of the largest adaptive signal control systems in the United States.

Delay and Travel Time on State Road 520 in Brevard County, FL

*Data depicts the percent reduction in the Delay and Travel Times.

