



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.
SECRETARY

December 11, 2014

TO: District Project Managers

RE: InSync Proprietary Product Justification Memo

Adaptive Traffic Control Systems (ATCSs), also known as real-time traffic control systems, adjust, in real time, traffic signal timings based on the current traffic conditions, demand, and system capacity. Although there are currently many ATCS deployments in the United States, these systems are not well understood by many traffic signal practitioners in the country and more experience with the functionality is needed in Florida. Their operational benefits are well documented, but there are still some reservations among the people in the traffic signal community. These systems are considered expensive and complex and they require high maintenance of detectors and communications.

Most ATCSs adjust three major types of signal timings: green splits, cycle lengths, and offsets. However, there are a few ATCSs that do not follow this rule either because they are still under development or because their operations are not based on all of these timings. Conversely, only a few ATCSs have been found to adjust or optimize phase sequencing in real time. And only one system (InSync from Rhythm Engineering) has passed all the requirements of the Department's Traffic Control Device Specifications and is listed on the Department's Approved Product List (APL).

The Department wishes to use InSync for ATCS deployment in Districts that have identified strategic pilot projects that can benefit the most from this technology. The Department has also partnered with the University of Florida to conduct before and after studies for evaluating the effectiveness and functionality of InSync. Pricing is subject to APL Statewide Contract amount and procurement can be sought through Request For Proposals (RFP), Design Build RFPs and/or Design Build Operate & Maintain RFPs, or purchased using the APL Statewide Contract. This justification memo is only intended for the InSync strategic pilot projects only. Furthermore, by installing InSync and upgrading the existing pilot project signal systems, the Districts and their County/City maintaining agencies will not only benefit from the improved level of service characterized by reduced stop-time, travel-time, fuel consumption and emissions, but also gain the knowledge and experience of system functionality. More importantly, InSync has shown to reduce crashes making roadways safer for motorists and pedestrians alike.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark C. Wilson".

Mark C. Wilson, P.E.
Director, Office of Traffic Engineering & Operations

cc: DTOEs, DITSEs, STAT Members
File: