

Edaptive Software and Hardware Summary Sheet Corridor 3

The proposed hardware and software system expansion will include the addition of the Edaptive Software module, Vehicle detection equipment, Network Switches, and Traffic Controllers for 22 traffic signals along corridor 3. The addition of this software and hardware allows for automated real-time adaptive signal control and cycle optimization of traffic signals which will adjust signal timings in response to real-time events. This will increase roadway efficiencies and reduce commuter delays by use of software by all traffic signal controllers working together as one system. Software enables proactive optimization of traffic signals even as traffic conditions change through both real-time and historical data. Software provides uninterrupted data collection and monitoring for increased signal performance through vehicle detection systems to adjust to traffic conditions on a continuous basis. Data collection abilities will reduce or eliminate the need to obtain traffic counts from an outside source. League City staff will be able to review analytical and historical data, then will be able to make routine adjustments to maximize the signal timing efficiencies which will reduce the need to obtain signal timings from an outside source. The reduction of third-party services will provide a significant overall cost savings. The proposed hardware will help us obtain the full functionality of the Edaptive Software. The vehicle detection cameras collect all traffic counts and data that is processed by the traffic controllers. The traffic controllers send and receive the data collected thru the network switch to the central server which has the Edaptive software installed. The design of this system is such that if there is a network failure all signal equipment in the field will continue to operate safely.