

MEMORANDUM

Date: May 6, 2025

To: Honorable Mayor and Commissioners

Via: Brian L. Barroso

City Manager

From: David Allen

Engineering Director

Subject: File ID: 25-3730 Approving purchase of 10 traffic signal cabinets, 14 traffic

signal controllers, and related equipment

KH

Introduction

Staff recommends that the Mayor and City Commission approve the purchase of replacement traffic signal cabinets, controllers, and related equipment from Transportation Control Systems, Inc. in the amount of \$348,908.00 and authorize the City Manager to execute any agreements, necessary budget transfers or budget amendments.

Background

There are currently 31 signalized intersections operated within City right-of-way owned by the City and maintained by Keys Energy Services via maintenance agreement. The majority of equipment at each of these intersections was installed in the 1990s and is based on technology and traffic signal equipment standards from the 1970s. Although Keys Energy Services promptly responds to reports of malfunctioning signals and attempts to stock replacement parts as best as possible, the frequency of issues, difficulty sourcing parts, and lack of compatibility with new parts is increasing as the system continues to age.

Purpose and Justifcation

In many locations, the effort to disassemble, troubleshoot, and rebuild traffic cabinets and associated wiring rivals or exceeds the cost of replacing the equipment entirely. City staff have reviewed the inventory of traffic signal equipment with input from Keys Energy Services as well as the City's traffic signal engineering consultant to identify intersections most in need of replacement equipment and requested a proposal from Transportation Control Systems, Inc., the sole provider of SWARCO McCain, Inc. traffic equipment in the state of Florida. SWARCO McCain products are the standard which the City and KES have adoped as equipment has been repaired and replaced over time, and so it is in the best interest of the City

to continue with replacement of any traffic equipment using SWARCO McCain products to avoid software and hardware compatibility issues, maintain unity in the products and equipment that the maintaining agency trains for, and reduce spread of maintenance inventory and support services.

The proposal received from Transportation Control Systems, Inc. is for 10 traffic signal cabinets, 14 controllers, and any other necessary equipment for each cabinet to operate, such as traffic monitors, interface units, isolation modules, and switchpacks. Additionally, traffic systems at each intersection will gain communications abilities which will allow for remote monitoring, troubleshooting, change in timing, as well as synchronization with other signals. The Miovision camera included in the proposal will be utilized at the intersection of Southard Street and Simonton Street to add vehice detection to reduce wasted green-time throughout the day on all approaches.

Keys Energy Services will be removing existing equipment and installing replacing cabinets, controllers, and other related equipment at no additional cost under the existing maintenance agreement, which presents a significant savings to the City.

The equipment will be used to replace existing at the following intersectons:

Intersection	Date of Installation
Simonton Street & Caroline Street	1997
Simonton Street & Eaton Street	1992
Simonton Street & Fleming Street	1996
Simonton Street & Southard Street	1994
Simonton Street & United Street	1994
Simonton Street & South Street	1994
Eaton Street & Duval Street	1999

As three of the most problematic signals identified by Keys Energy Services are along Simonton Street, staff concluded that it is in the best interest to combine support and construction efforts to include the remaining intersections of Simonton Street. The remaining equipment will either be kept as spares or used to replace equipment at additional intersections which will be identified at a later date. Among candidates are Flagler Ave & Bertha Street, Flagler Avenue & Kennedy Drive, Eaton Street & White Street, and Flagler Ave & White Street, all due to the significance of traffic at these locations as well as installation dates ranging from 1992-2005.

Financial

The total of this proposal amounts to \$348,908.00. Budget for this project comes from II41022501 which is currently funded at \$500,000.00. Remaining funding for this project will be used in conjunction with this proposal for construction and consultation support services. The FY24/25 budget is on track for replacement of 30% of the City's traffic signalization systems which are beyond their useful service life. The is a sole source procurement pursuant to Sec. 2-797. – Exemptions.

Recommendation

Staff recommends that the Mayor and City Commission approve the purchase of replacement traffic signal equipment from Transportation Control Systems, Inc. in the amount of \$348,908.00 and authorize the City Manager to execute any necessary contracts, budget transfers, or amendments, upon consent of the City Attorney.