County Connection

INTER OFFICE MEMO

To: Operations & Scheduling Committee   **Date:** 05/31/2023

From: Chan Saechao, Director of IT   **Reviewed by:** Rtf

SUBJECT: Transit Signal Priority (TSP) System Update

Background:

In April 2022, County Connection, in partnership with Metropolitan Transportation Commission (MTC), the cities of Concord and Walnut Creek, as well as the Contra Costa Transportation Authority (CCTA) inquired proposals for the deployment of a central conditional Transit Signal Priority (TSP) system on certain County Connection buses along corridors within the cities of Walnut Creek and Concord, with hopes of eventually expanding countywide in the future. Stakeholders selected Global Traffic Technologies (GTT) to carry out the TSP plan.

Year-to-Date Progress:

The project was broken up into five (5) task areas, which were then divided into smaller tasks. Task 1 was to develop the implementation schedule, which was completed in September 2022. Task 2 is to Furnish TSP system software and hardware, which is the preparation for the pilot. Task 3 includes installation, integration, and deployment. Task 4 is testing and accepting the project completion. Task 5 is for training and documentation. Tasks 1 and 2 have already been completed. Tasks 3 and 5 are projected to be completed by the beginning of June 2023. Task 4 is projected to be completed by July 2023, thus concluding the project. However, due to a chip shortage, the project may be delayed. Once the initial project phase is completed, the TSP system will be piloted for one year to evaluate efficiency.

County Connection staff have been involved with coordinating the installation of extensibility docks on thirty-one (31) buses in preparation for TSP. Other tasks that staff have been involved with includes acquiring the CradlePoint Essential Licenses, coordinating with dispatch for the TSP pilot tests on May 22nd and May 23rd, as well as providing a URL to GTT to begin General Transit Feed Specification Realtime Services (GTFS-RT).

The TSP pilot testing was proven to be successful. GTT demonstrated that County Connection buses can request Transit Signal Priority at TSP-enabled intersections, when certain conditions are met, such as vehicle capacity and on-time performance. Buses are granted priority when the traffic controllers are properly programmed and connected to GTT's Opticom Cloud Platform.

Financial Implications:

The project is being funded by MTC through the IDEA grant with a budget totaling $1,320,792. County Connection will provide in-kind IT and planning services on an ongoing basis.

Recommendation:

None, for information only.

Action Requested:

None, for information only.

Attachments:

None.