

Administration and Projects Committee **STAFF REPORT**

Meeting Date: April 04, 2024

Subject	Intelligent Transportation Systems/Traffic Signal Modernization (Project 31007) (Project) – Authorization to Execute Funding Agreement No. 674 with the City of Concord (City) to Provide Local Match Funding
Summary of Issues	The City was awarded a federal earmark through the Community Project Funding/Congressionally Directed Spending (CPF/CDS) Grant in the amount of \$1.2 million for the Project. This Federal grant requires a minimum of 11.47% in local match funding. The City will provide match funding in the amount of \$155,473.
Recommendations	Staff seeks authorization for the Chair to execute Funding Agreement No. 674 with the City, to provide local match funding in the amount of \$155,473 to match the \$1.2 million in awarded Community Project Funding/Congressionally Directed Spending Grant funds, which will be applied towards all phases of the Project, and to allow the Executive Director or designee to make any non-substantive changes to the language.
Staff Contact	Jack Hall
Financial Implications	This request is funded by the CPF/CDS Grant funds in the amount of \$1.2 million and local match in the amount of \$155,473, for a total project cost of \$1,355,473.
Options	The Authority Board could elect to not approve this request.
Attachments (See APC Packet dated 4/4/24)	A. Funding Agreement No. 674

Changes from Committee*None*

Background

In 2022, the City was awarded a federal earmark through the CPF/CDS Grant in the amount of \$1.2 million for upgrades and modernization of signalized intersections at thirty-one (31) locations along Concord Boulevard, Concord Avenue, and Oak Grove corridors.

The Project will develop, manage, and implement Intelligent Transportation Systems (ITS) initiatives that improve the safety and efficiency of multimodal mobility, maximize highway and arterial system throughput, improve operational efficiency and safety, and reduce environmental impact throughout the City. By upgrading the existing legacy systems and providing interconnectivity throughout the City's signal systems, the City's traffic signal systems can be prepared for future emerging technologies including connected and/or autonomous vehicles, big data, integrated corridor management, and implementation of incident management strategies and Smart Cities initiatives. This solution can enhance the sharing of real-time information between agencies and the public using existing and next generation ITS technologies. The upgraded traffic signal systems and signal interconnect will help smooth traffic flow and ease recurring traffic congestion by expanding mode choice options and reducing travel time on local streets and roads. The Project would also improve the safety of pedestrians, bicyclists, vulnerable road users, and people with disabilities by deployment of detection systems.

The Project's key features and benefits include:

- Providing infrastructure for a citywide traffic management system.
- Deploying video detection cameras that can detect pedestrians and bicycles along with vehicles.
- Implementing Pan-Tilt-Zoom cameras at key intersections within the City.
- Upgrading controllers at locations that still have legacy controllers.
- Adding ethernet switches for better and more reliable communications between the field devices and City Hall.
- Install Advanced Transportation Controller Standards Cabinets at two intersections.
- Install battery backup systems at key intersections.

- Implement Roadside Units and a Cellular Vehicle-to-Everything system to prepare the City for the deployment of connected and/or automated vehicles.

The table below summarizes the federal and local match funding for the City.

Project Fund Summary			
Project Phase	Federal Earmark Fund	Local Match	Total
Preliminary Engineering (PE)	\$109,667	\$14,209	\$123,876
Construction (CON)	\$1,090,333	\$141,264	\$1,231,597
Total	\$1,200,000	\$155,473	\$1,355,473

Staff seeks authorization for the Chair to execute Funding Agreement No. 674 with the City, to provide local match funding in the amount of \$155,473 to match the \$1.2 million in awarded CPF/CDS Grant funds, which will be applied towards all phases of the Project, and to allow the Executive Director or designee to make any non-substantive changes to the language.

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