836780 - Sunnyvale ITS Communications and Infrastructure

Originating Year:2023Project Type:Traffic and TransportationDepartment:250 - Public Works

Planned Completion Year:2025/26Category:CapitalProject Manager:Carmen Talavera

Project Description/Scope/Purpose

The project will design, procure and implement traffic signal equipment and communications equipment on Maude Avenue between Mathilda Avenue and Wolfe Road and on Mathilda Avenue between Maude Avenue and Olive Avenue. All equipment will connect to City Hall. This equipment will include fiber optic cables, traffic monitoring cameras and Americans with Disabilities Act approved touchless accessible pedestrian system buttons where they do not currently exist along these corridors. These corridors are used/crossed by VTA Bus Lines 21, 55, 56, 255, and 523. Mathilda Avenue is also a Congestion Management Program (CMP) facility which carries significant commute and regional traffic. This project serves one of the Equity Priority Communities in Sunnyvale bounded by the Maude Avenue to the south, Fair Oaks/Wolfe Road to the east, Hwy 101 to the north and Mathilda Avenue to the west.

Project Evaluation and Analysis

The City's Intelligent Transportation Systems (ITS) Master Plan was created to identify hardware and infrastructure needed for the buildout of the traffic signal communication network utilizing fiber optic technology. The ultimate goal is to integrate all of Sunnyvale's traffic signals and ITS components (e.g., traffic monitoring cameras, connected vehicle infrastructure, Bluetooth travel time sensors, and video detection camera systems) into the City's Centralized Advanced Traffic Management System.

To date, portions of the City's traffic signal communication system have been updated from copper signal interconnect wiring to fiber optic cables. Various other ITS components have also been implemented. This project will further advance the ITS Master Plan goals.

Fiscal Impact

The design and construction of this project will be completely funded by the 2010 Measure B Vehicle Registration Fee (VRF) Countywide Program Funds - Cycle 4. FY 2023/2024 Budget Modification No. 16 was approved by City Council on March 19, 2024 (RTC24-0182).

Funding Sources

2010 Measure B Vehicle Registration Fee (VRF) Countywide Program Funds - Cycle 4

Plans and Goals

LT - Land Use and Transportation - LT-1: Coordinated Regional and Local Planning

CC - Community Character - CC-2: Attractive Street Environment

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	13,854	-	-
2024-25	446,146	460,000	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	=	Ē
2036-37	-	-	<u>-</u>
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
2043-44	-	-	-
2044-45		-	-
20 Year Total	-	-	-
Grand Total	460,000	460,000	-