825730 - Pedestrian Lighted Crosswalk Maintenance and Replacement

Originating Year:	2006	**Project Type:**	Traffic and Transportation	**Department:**	250 - Public Works
Planned Completion Year:	Ongoing	**Category:**	Infrastructure	**Project Manager:**	Carmen Talavera

Project Description/Scope/Purpose

This project provides funding for the maintenance and replacement costs of the controller, lights, batteries, solar panels, controller/batteries enclosure, push buttons, flashing beacons, signs, and poles of in pavement-lighted crosswalk warning (IRWL) and Rectangular Rapid Flashing Beacon (RRFB) systems. The City currently operates and maintains 13 IRWL and 15 RRFB systems, these systems have an estimated life cycle of five to six years, based on the City's experience and information from the manufacturers. Funds are budgeted according to the installation date of the various systems. Also, this project will cover the infrastructure replacement for the following:

Project 832920 (East Sunnyvale Area Transportation Improvements) RRFB is every 20 years at a cost of $150,000 each (2 RRFBs needed). The replacement cycle for RRFBs begins in FY 2042/43 and is every twenty years after.

Project 834490 (Enhanced Crosswalk on California at Pajaro Avenue) RRFB every 20 years at a cost of 74,000 for the entire system. The replacement cycle begins in FY 2043/44 and is every twenty years after. The most recent project was completed in FY 2023/24.

Project 833000 (Sunnyvale SNAIL Neighborhood Improvements – ATP) HAWK system every 20 years at a cost of $300,000. The replacement cycle begins in FY 2042/43 and is every twenty years after.

Project 833010 (Bicycle and Pedestrian Safety Improvements) RRFB every 20 years at a cost of $150,000 each (2 RRFBs Needed). The replacement cycle for RRFBs begins FY 2045/46 and is every twenty years after.

Project 833790 (Pedestrian and Bicycle Infrastructure Improvements). The project replacement cycle is every twenty years starting in FY 2042/43 for a cost of $282,000.

The existing RRFB at Fremont Avenue and Sydney Drive to a HAWK system every 20 years. Design for new HAWK system starts in FY 2024/25 with an estimated cost of $120,000, replacement of system starts FY 2025/26 with an estimated cost of $660,000 and is every twenty years each after.

Project Evaluation and Analysis

Pedestrian lighted crosswalk and rectangular rapid flashing beacon systems improve pedestrian safety. These systems require periodic maintenance and replacement in order to remain operational and enhance the safety of pedestrians.

Fiscal Impact

This project will cover the maintenance and replacement costs for existing Pedestrian Lighted Crosswalk systems based on an estimated life cycle. As new systems are added, replacement costs will also be incorporated into this project.

Funding Sources

General Fund

Plans and Goals

LT - Land Use and Transportation - LT-3: An Effective Multimodal Transportation System

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	616,177	115,244	-
2024-25	1,558,015	347,431	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	474,000	-	-
2037-38	330,000	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	237,000	-	-
2041-42	967,500	-	-
2042-43	1,147,500	-	-
2043-44	-	-	-
2044-45	-	-	-
20 Year Total	**3,156,000**	**-**	**-**
Grand Total	**5,330,192**	**462,675**	**-**