Project: 833890 - Mary Avenue at Caltrain Tracks Grade Crossing Safety Improvements

Category: Capital

Project Type: Traffic and Transportation

Year Identified: 2018

Project Phase: Underway

Est. Completion Year: 2019/20

Department: C90 - Public Works

Project Manager: Dennis Ng

Project Coordinator: Carmen Talavera

Fund - Sub-Fund: 385-100 - Capital Projects - General Fund

Assets

Project Description/Scope/Purpose:

In late 2017, a concern was received about the traffic signal timing for the railroad crossing on N. Mary Avenue. Staff calculated the railroad interconnect system's preemption timings and identified potential improvements to the existing timings. Staff approached Caltrain with its findings; they performed a diagnostic and confirmed staff's initial findings. Caltrain turned this into a priority safety improvement project and secured \$3.8 million in Railway-Highway Crossings (Section 130) funding. This is a joint project between the City of Sunnyvale and Caltrain.

As part of the improvements, Caltrain will implement advance railroad preemption and the City of Sunnyvale will modify traffic signal phasing to utilize advanced railroad preemption, install new curb ramps on southwest and southeast corners, modify striping, widen sidewalk in the northwest quadrant, reconstruct 160 feet of median island on the north approach and upgrade safety lighting.

Project Evaluation and Analysis:

The project is now underway and on completion, advance railroad preemption operations will be implemented that will increase the warning time to clear the railroad tracks before the train gates go down. The existing preemption time at this location is not sufficient to clear the railroad tracks safely. To meet the desired standard additional warning timing is needed for the gates to go down without abruptly terminating vehicular and pedestrian movements conflicting with the train. This should not affect the vehicular throughput. The City's traffic signal will get early notification of approaching train so that railroad clearance traffic signal preemption routine can start earlier, and all the movements crossing railroad tracks are cleared before the train arrives.

Fiscal Impact:

The project is fully funded by Railway-Highway Crossings (Section 130) grant funds in the amount of \$3,125,000 for Caltrain's portion and \$698,625 for the City's portion. No matching funds are required.

Funding Sources:

Railway-Highway Crossings (Section 130) Grant

Plans and Goals:

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

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	13,838	13,838	-	-
2019 - 20	684,787	684,787	-	-
2020 - 21	-	-	-	-
2021 - 22	-	-	-	-
2022 - 23	-	-	-	-
2023 - 24	-	-	-	-
2024 - 25	-	-	-	-
2025 - 26	-	-	-	-
2026 - 27	-	-	-	-
2027 - 28	-	-	-	-
2028 - 29	-	-	-	-
2029 - 30	-	-	-	-
2030 - 31	-	-	-	-
2031 - 32	-	-	-	-
2032 - 33	-	-	-	-
2033 - 34	-	-	-	-
2034 - 35	-	-	-	-
2035 - 36	-	-	-	-
2036 - 37	-	-	-	-
2037 - 38	-	-	-	-
2038 - 39	-	-	-	-
2039 - 40	-	-	-	-
20 Year Total	-	-	-	-
Grand Total	698,625	698,625	-	-