



DATE: September 28, 2021

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Adopt a Resolution Authorizing the City Manager to Accept \$774,900 in Awarded Grant Funding from the Federal Highway Safety Improvement Program for the Signal Modification at Huntwood/Industrial and Huntwood/Sandoval Intersections Project (05737) and to Appropriate the Grant Funds

RECOMMENDATION

That the Council adopts a resolution (Attachment II) authorizing the City Manager to accept and appropriate Federal Highway Safety Improvement Program (HSIP) awarded grant funding from the California Department of Transportation (Caltrans) in the amount of \$774,900 for the Signal Modification at Huntwood/Industrial and Huntwood/Sandoval Intersections Project (05737).

SUMMARY

Staff was successful in obtaining a HSIP grant to fund 90% of the construction cost for the Signal Modification at Huntwood/Industrial and Huntwood/Sandoval Intersections Project. The grant sponsor, Caltrans, awarded the City \$774,900 towards construction costs. The total project cost is \$965,000, which includes \$861,000 for construction. The City's required local match of 10% is \$86,100, which combined with the HSIP grant will provide funding for the total construction cost of \$861,000. The remaining amount of \$104,000 in the total project cost is for engineering design services, and staff costs. The Project has an appropriated budget through the Fiscal Year 2021-2022 budget process of \$965,000 from the City's Transportation System Improvement Fund (Fund 460). Also, this Project was reviewed and approved by the City's Grant Committee in January 2021.

BACKGROUND

The HSIP is one of the core federal-aid programs in the new Federal Surface Transportation Act (FSTA), Fixing America's Surface Transportation Act (FAST), which was signed into law on December 4, 2015. The purpose of the HSIP program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.

Senate Bill (SB) 137, effective October 8, 2019, authorizes Caltrans to allow up to \$100 million of federal local assistance funds to be exchanged for non-federal State Highway Account (SHA) funds. The exchange requires funds be used by a city, county, or other eligible recipients. On Tuesday, May 5, 2020, Caltrans Division of Local Assistance (DLA) announced Cycle 10 Call for Projects for the Highway Safety Improvement Program (HSIP). The total funds available for HSIP Cycle 10 are estimated at approximately \$220 million. The City of Hayward was awarded \$774,000, which will be used to fund 90% of the construction cost for the Signal Modification at Huntwood/Industrial and Huntwood/Sandoval Intersections Project. The City's required 10% match is \$86,100, for a total construction cost of \$861,000.

The City has received several resident concerns and complaints in the past five years regarding traffic queuing, delays, and safety of pedestrians and bicycles at the intersections of Huntwood/Industrial and Huntwood/Sandoval. To address these concerns, staff installed signal interconnect and added functionality to activate simultaneous serving of the northbound phases at the two intersections. Although this effort helped in traffic queue reduction to some degree, it did not alleviate the issue significantly. A more comprehensive signals modification project was needed to fully address the problem. As a result, staff applied for the HSIP grant.

DISCUSSION

Currently, Huntwood Avenue is a bidirectional north-south four lane collector street. The project was first identified as a part of the Huntwood Avenue Road Diet Study, which proposed installing Class II bicycle lanes along Huntwood Avenue north of Industrial Pkwy W. This study included a preliminary operational and safety analysis to develop lane configuration and signal phasing modifications at these two intersections.

Additionally, Union Pacific Railroad tracks are present approximately 185 feet south of the intersection of Huntwood Avenue/Sandoval Way without any gates or preemption equipment. The combination of heavy truck and vehicle traffic demands exceeding existing roadway capacity, closely spaced intersections, and the presence of railroad tracks results in significant delays and traffic queuing at the intersections. The presence of railroad tracks creates a hazardous situation for vehicles that may be on the railroad tracks due to traffic queuing when a train arrives as the current signal system does not provide for track clearance measures during such instances.

A traffic operational analysis was conducted to evaluate traffic signal operations and recommend improvements. The purpose of this analysis was to enhance bicycle and pedestrian safety, the safety of vehicles maneuvering through the intersections, optimize traffic flow, and minimize spillover of traffic queues on the railroad tracks on Huntwood Avenue, south of Sandoval Way. The results from the traffic operation analysis recommended the following improvements for these two intersections:

1. Install protected left-turn phase at Huntwood/Industrial
2. Install protected-permissive left-turn phase at Huntwood/Sandoval
3. Install Hybrid Video Detection for bikes and queue cutters
4. Upgrade Peer-to-Peer Communication

Converting the existing signal operations with protected left-turn phasing will reduce traffic delays and queuing at the intersections, thereby reducing driver frustration and non-adherence to traffic controls which will reduce collisions and improve pedestrian and bicycle safety. Additionally, video bicycle detection will ensure detection, service of bicyclists and sufficient green intervals improving bicycle safety. Upgrading existing communication between the two intersections and queue clearance detection before the railroad tracks will reduce traffic queues and spillover onto the railroad tracks preventing potentially hazardous situations.

ECONOMIC IMPACT

Active transportation options like bicycling and walking foster economic health by creating dynamic, connected communities with a high quality of life. Providing alternate modes of travel reduces single lane occupancy vehicles and reduces congestion and costs related to automobile-oriented infrastructure maintenance and construction. The overall transportation system will be more efficient, thus reducing travel time. Moreover, the City will become a more pedestrian and bicycle-friendly community, which will create positive economic and health benefits and reduction of greenhouse gas emissions.

FISCAL IMPACT

This item has a total appropriated project budget of \$965,000 from the City's Transportation System Improvement Fund (Fund 460). The grant funding will reimburse 90% (\$774,900) of the construction costs. The estimated project costs are as follows:

Construction Contract	\$861,000
Design and Administration	\$75,000
Internal Staff Costs	<u>\$29,000</u>
	\$965,000

STRATEGIC ROADMAP

This item supports Council's strategic priority of Improve Infrastructure. Specifically, this item relates to the implementation of the following project(s):

Project 8, Part 8b. Implement the Bicycle and Pedestrian Master Plan; Add 10 lane miles of bike lanes per year.

Project 8, Part 8c. Implement the Bicycle and Pedestrian Master Plan; Assess Safe Routes to School

Project 8, Part 8d. Implement the Bicycle and Pedestrian Master Plan; Implement Safe Routes to School

SUSTAINABILITY FEATURES

The action taken for this agenda report will result in supporting mobility goals established as part of the City's 2040 General Plan, providing an opportunity for the community to experience traffic calming and protected bicycle lanes improvements which would help

facilitate Huntwood Avenue into an equitable complete street. It provides a balanced multi-modal system of transportation facilities and services by applying best practices. The plan will increase transportation options, reduce environmental impacts of the transportation system, and enhance the overall quality of life for residents. The goal of the project is to develop convenient transportation alternatives to motor vehicles for residents, visitors, shoppers, and commuters. The resulting reduction in single occupancy vehicles will reduce vehicle miles traveled and greenhouse gases.

PUBLIC CONTACT

City staff intends to have a public meeting in November 2021 to allow for additional community input.

NEXT STEPS

If Council approves this request, the City Manager will accept and appropriate the grant funding. Staff anticipates advertising for construction bids in January 2022.

Prepared by: Dr. Ayeh Khajouei, Associate Transportation Planner

Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager