



**DATE:** October 6, 2020

**TO:** Mayor and Council

**FROM:** Director of Public Works

**SUBJECT:** Huntwood and Patrick Avenues Complete Streets: Adopt a Resolution Approving Complete Streets Improvements

### **RECOMMENDATION**

That Council adopts a resolution (Attachment II) approving Complete Streets improvements on Huntwood Avenue between Tennyson Road and Industrial Parkway and on Patrick Avenue between Tennyson Road and Schafer Road.

### **SUMMARY**

Over the years, Council has taken several actions to develop policy that ensures the City builds streets that are safe and convenient for all modes of travel, regardless of age or ability. Focus has been set on accommodating all road users including motorists, pedestrians, bicyclists, and transit riders. The Huntwood and Patrick Avenues Complete Streets Improvements derive from such policies as the Mobility Element in the Hayward 2040 General Plan, the Complete Streets Policy adopted in 2013, the Complete Streets Strategic Initiative adopted in 2017, and the Strategic Roadmap Priority for Improving Infrastructure adopted earlier this year.

The Huntwood and Patrick Complete Streets Improvements propose the installation of a Class IV Separated Bicycle Facility made possible through implementation of a road diet on Huntwood Avenue from Tennyson Road to Industrial Parkway, and on Patrick Avenue from Tennyson Road to Schafer Road. Although the road diet reduces each direction to one lane, the lane assignments at major intersections will remain unchanged.

On July 20, 2020, staff introduced a proposed draft complete streets improvement concept and outreach plan for the Huntwood and Patrick Avenues Complete Streets Improvement Projects to Council. Council agreed to staff's outreach plan with an understanding that staff would return to City Council to summarize public feedback and recommend Complete Streets Improvement Projects for approval.

Staff conducted public outreach for the complete street improvements on both corridors. Information on the complete street improvements were advertised through various social media forums – Instagram, Facebook, Twitter, and Nextdoor. The mailers and social media posts included details on how to submit feedback on the proposed project and a link to the project webpage for more information.

Based on valuable and constructive comments received from area residents and businesses, staff recommends the approval of the complete streets improvements for Huntwood Avenue from Tennyson Road to Industrial Parkway as depicted in Attachment III, and Patrick Avenue from Tennyson Road to Schafer Road as depicted in Attachment IV.

## **BACKGROUND**

The Hayward 2040 General Plan includes Goal Mobility-3, to provide Complete Streets, designed to balance the diverse needs of users of the public right-of-way. The 2040 General Plan provides the long-term vision and goals that serve as the foundation for implementing transportation projects. The General Plan Guiding Principle 7 states that “Hayward residents, workers, and students should have access to an interconnected network of safe, affordable, dependable, and convenient transportation options.” Furthermore, the Mobility Element within the General Plan establishes goals and policies to improve the mobility of people and goods within and through the City. Rather than focusing on automobile transportation, the Mobility Element seeks to create a balanced transportation network that supports and encourages walking, bicycling, and transit ridership. Specifically, Goal M-4.7: Neighborhood Traffic Calming of the Local Circulation subcategory states that “the City shall continue to evaluate circulation patterns and implement appropriate traffic calming measures to prevent speeding in neighborhoods. Local access and circulation effects not only vehicular travel, but also walking, biking, and transit. Local access and circulation for all modes include managing the roadway system to improve traffic flow while protecting the neighborhoods from speeding motorists.

On March 19, 2013, the City Council adopted Resolution No. 13-027, supporting a citywide Complete Streets Policy to support design and development of a comprehensive, integrated transportation network to allow for safe, convenient travel along and across streets for all users. The Complete Streets Policy implements the California Complete Streets Act and requirements adopted by the Metropolitan Transportation Commission and Alameda County Transportation Commission that require the development of complete streets in order receive transportation infrastructure funding.

On June 20, 2017, the City Council adopted the Complete Streets Strategic Initiative. The overarching purpose of the Complete Streets Strategic Initiative is to build and maintain streets that are safe and comfortable to travel for everyone, regardless of age or ability. Three goals and corresponding objectives are identified in the Complete Streets Strategic Initiative.

For Goal 1, “prioritize safety for all modes of travel,” three objectives have been identified.

Objective 1: Reduce number of fatal and non-fatal traffic accidents in the City through engineering evaluation of major intersections and corridors.

Objective 2: Reduce speeding and aggressive driving behavior through the 4 E's - Education, Enforcement, Empowerment and Engineering.

Objective 3: Ensure that roadway construction and retrofit programs and projects include complete streets elements.

For Goal 2, "provide complete streets that balance the diverse needs of users of the public right-of-way," one objective has been identified.

Objective 1: Increase walking, biking, transit usage, carpooling, and other sustainable modes of transportation by designing and retrofitting streets to accommodate all modes.

For Goal 3, "maintain sufficient funding to provide for existing and future transportation facility and service needs, including the operation and maintenance of the transportation system," two objectives are identified.

Objective 1: Establish a sustainable funding mechanism and dedicated funding source to build a complete streets network.

Objective 2: Develop and implement best practices related to ongoing maintenance of complete streets facilities.

Complete street improvements are supported by all these aforementioned policies that Council has adopted to ensure the City builds streets that are safe and accommodates all road users for travel regardless of age or ability. There are various methods in making complete streets. One method for incorporating a complete street is implementing traffic calming measures, such as road diets or vehicular lane width narrowing. Traffic calming is a term used to describe a full range of methods to slow cars through neighborhoods and balances the uses of a street, so no one mode can dominate at the expense of another.

Complete street improvements are the combination of measures that reduce the negative effects of motor vehicle use, alter driver behavior, calm traffic, and improve conditions for non-motorized street users. The traditional road safety benefits of lower vehicle speeds include saving lives and reducing the impact and likelihood of collisions. However, speed reduction has important additional benefits that increase the quality of life for society-at-large. These benefits include a reduction in traffic noise, pollution, greenhouse gases, average fuel consumption, and barrier effects. Moreover, these effects will encourage cycling and walking that have wider health benefits for society. Speed reduction through the implementation of complete street improvements through traffic calming thus pays off in numerous ways. Road diets and vehicular lane narrowing may be implemented through cost-effective pavement striping modifications and offer potential benefits to all road users.

Hayward projects, such as the Mission Boulevard Corridor Improvement Project Phases 2 and 3 and the Main Street Complete Street set the precedent for creating complete streets through implementation of road diets and lane width narrowing. All of these projects took a complete streets approach with the goal of enhancing the road for all users.

The City's Pavement Improvement Program has traditionally provided the most cost-effective opportunities for implementing bicycle facilities and enhanced pedestrian facilities. When planning in conjunction with reconstruction or overlay projects, the change in cross section may be completed with relatively little additional costs. Complete street improvements can typically cost \$25,000 to \$40,000 per mile, depending on the number of lanes that need to be repainted; thus, traffic calming improvements can be implemented at modest additional cost if implemented in conjunction with the City's Annual Pavement Improvement Project.

In addition to the Complete Streets Policies adopted by Council, staff referenced the Bicycle Facilities Recommendations Map in the 2020 Bicycle and Pedestrian Master Plan to determine locations for new or upgraded bicycle facilities. In conjunction with community complaints relative to speeding supported by data collected by staff, two corridors stood out as opportunities to design complete streets. Huntwood Avenue (between Schafer Road and Whipple Road) and Patrick Avenue (from Tennyson Road to Schafer Road) were two corridors emanating from the FY20 Paving Program list of projects.

Furthermore, on July 20, 2020, staff introduced to Council a proposed draft complete streets improvement concept and outreach plan for the Huntwood and Patrick Avenues Complete Streets Improvement Projects. Council agreed to staff's outreach plan with an understanding that staff will return to City Council to summarize public feedback and recommend Complete Streets Improvement Projects for approval.

## **DISCUSSION**

### Huntwood Avenue between Tennyson Road and Industrial Parkway

The staff-recommended complete street improvements on Huntwood Avenue do not encompass the full limits of the FY20 Pavement Improvement Project (Schafer Road to Whipple Road). Instead, following receipt of public comments, staff limited the recommended improvements to the residential segment of Huntwood Avenue from Tennyson Road to Industrial Parkway. Feedback from the community was invaluable in helping reexamine the initially proposed project limits. The initial proposed project limits were Huntwood Avenue from Tennyson Road to Whipple Road, but due to the overwhelming opposition of a road diet in the business park area on Huntwood Avenue from Industrial Parkway to Whipple Road, proposed improvements were limited to the residential area.

Huntwood Avenue between Tennyson Road and Whipple Road is a four-lane, mostly residential minor arterial roadway with Class II Bicycle Lanes in both directions and on-street parking on both sides and provides access to Tennyson Park, residential, commercial, and industrial properties. A Class II bicycle facility is a lane on the road,

exclusively for the use of bicyclists, marked with a white line painted on the pavement to separate bicyclists from general automobile traffic. This segment of Huntwood Avenue carries an Average Daily Traffic (ADT) volume of approximately 12,000 vehicles per day and has a posted speed limit of 30 miles per hour (MPH). Based on a speed survey conducted in February 2020, the 85<sup>th</sup> percentile speed was 40 MPH between Tennyson Road and Industrial Parkway and 48 MPH between Industrial Parkway and Whipple Road. The 85<sup>th</sup> percentile is the speed that 85 percent (85%) of all vehicles are observed to travel at or below. This means that 15% of motorists are traveling at a faster speed than the 85<sup>th</sup> percentile speed. Based on the data collected and analyzed, staff determined that these segments of Huntwood Avenue will benefit from complete street measures.

Consequently, the draft 2020 Bicycle and Pedestrian Master Plan proposes a Class IV Separated Bicycle Facility on the segment of Huntwood Avenue between Tennyson Road and Whipple Road. A Class IV Separated Bicycle Facility is an on-street bicycle lane with some type of a physical vertical barrier between the bike lane and the motor vehicle lane, such as flexible bollards, planters, or curb. For example, a Class IV separated bicycle facility is installed on Mission Boulevard south of Garin Avenue for reference.

#### Patrick Avenue between Tennyson Road and Schafer Road

Patrick Avenue between Tennyson Road and Whipple Road is a four-lane roadway with no bicycle facilities. Patrick Avenue serves residential, religious institutions, primary grade schools, the Weekes Community Center Park, and the Weekes Branch Public Library. This segment of Patrick Avenues carries an ADT volume of approximately 11,000 vehicles per day. While the posted speed limit is 25 MPH, the 85<sup>th</sup> percentile speed based on a two-day speed survey was 37 MPH. This means that 85% of motorists are traveling at 37 MPH or slower and that 15% of motorists are traveling at a speed faster than 37 MPH. Based on the data collected and analyzed, staff determined that Patrick Avenue will benefit from complete streets measures.

Staff concurred with the complete streets improvements on Patrick Avenue recommended by the University of California at Berkeley's Safe Transportation Research and Education Center (SafeTREC). SafeTREC's recommendations came after facilitating a Community Pedestrian and Bicycle Safety Training (CPBST) with thirty-four (34) members of the public analyzing collision history and examining existing conditions. Shorter crossing distances, enhanced crosswalks, road diet, bicycle facilities, and addressing speeding concerns were all listed as recommendations by SafeTREC. Additionally, complete street improvements were presented to and supported by the South Hayward Neighborhood Collaborative (SHNC) in February 2020. The consensus from SHNC was a support for allocation of reclaimed space for other transportation modes, shorter pedestrian crossings, and address speeding – all of which are results of the implementation of a road diet. Consequently, the 2020 Bicycle and Pedestrian Master Plan proposes a Class IV Separated Bicycle Facility on Patrick Avenue from Tennyson Road to Schafer Road.

#### Public Feedback

Staff received several emails of valuable feedback for the Huntwood and Patrick Avenues Complete Streets Improvement Project. The most common concerns received were related to congestion, northbound queuing lengths at the Industrial Parkway and Huntwood Avenue traffic signal intersection, safety, emergency vehicle access, and ease of making left turns from side streets. Staff reviewed and studied these concerns and determined the most appropriate complete street improvements for these corridors.

Congestion was the most common concern for Huntwood and Patrick Avenues. National guidance suggests that streets with an ADT under 20,000 vehicles per day are good candidates for reductions to a single lane per direction without a feasibility study. Under most ADT conditions tested, road diets have minimal effects on vehicle capacity. The ADT for this segment of Huntwood averages around 12,000 vehicles per day and Patrick Avenue averages around 11,000 vehicles per day, both of which are well under the Federal Highway Administration's threshold of guidance. Moreover, congestion does not occur mid-block, but typically at controlled intersections, which are remaining unchanged for the most part. Crosswalks, traffic signals, and stop signs are all examples of controlled intersections. Traffic flow at controlled intersections restricts traffic flow throughout the corridor because vehicles are controlled by the stopping or yielding the right-of-way at intersections. To minimize any potential delays from the complete street improvements, staff determined it would be best to leave intersections unchanged. Excessive speeds on Huntwood and Patrick Avenues also indicate that the congestion problem does not exist where staff proposes a road diet, although we understand that some may perceive otherwise from the impacts of the controlled intersections. In fact, what is most attributed to the perception of congestion on these corridors are existing inefficient signal timing and lane assignments at intersections. Modifications at the signalized intersections on Huntwood and Patrick Avenues are not feasible without high-cost signal equipment upgrades.

Another concern from the public was northbound Huntwood Avenue queuing created in part by the coordinated signals at Industrial Parkway and Sandoval Way. As well as receiving requests for addressing speeding concerns on Huntwood, staff has previously received requests for addressing the signal timing coordination at the two intersections on Huntwood Avenue at Industrial Parkway and Sandoval Way. Based on Vehicle Turning Movement Counts and signal timing, information was collected and analyzed at the intersections of Huntwood Avenue at Industrial Parkway and Sandoval Way. It was determined that the signal equipment at these intersections are inadequate to modify the phasing sequences. Consequently, staff is applying for the Highway Safety Improvement Program (HSIP) Grant provided through CalTrans to fund the signal equipment and timing improvements at these intersections. At this time, staff will not be making any changes to the signals at the Huntwood Avenue intersections at Industrial Parkway and Sandoval Way. Striping will remain as it exists now.

Some feedback mentioned a concern of deteriorated safety. Hayward Police Department Collision Reports for a five-year period from January 2015 to December 2019 on Huntwood Avenue between Tennyson Road and Whipple Road, and Patrick Avenue between Tennyson Road and Schafer Road indicate that the majority of reported collisions were

documented as being attributed to unsafe speeds, lane changing, unsafe turning, and right-of-way violations. The recommended complete street improvements for these two corridors are designed to directly address safety concerns regarding speeding, lane changing, unsafe turning, and right-of-way violations with bicyclists and pedestrians. Thus, reducing the quantity and the severity of collisions on Huntwood Avenue and Patrick Avenue where these complete street improvements are being recommended.

Staff received feedback regarding the hinderance and delay for emergency vehicle access. Public Works staff coordinated approval of the recommended improvements from both Police and Fire Departments. The two-lane combination with center turn lane configuration is not uncommon in Hayward as these roadway configurations already exist throughout the City, such as on Huntwood Avenue between Schafer Road and Gading Road, Santa Clara Street between Elmwood Lane and El Dorado Avenue, and Skywest Drive south of A Street. The center turn lane at these locations are always available at any time for use in case of emergencies with no complaints from first responders.

Worsening the existing difficult situation of turning out of side streets was a concern for some residents. Residents cited specific trouble with making left turns out of the side streets onto the main street. However, a road diet will improve local access because motorists making left turns from the side streets will only need to scan for a break in traffic in two lanes as opposed to four lanes.

Taking feedback and the technical studies into consideration, staff recommends complete street improvements through a road diet in the residential area of Huntwood Avenue from Tennyson Road and Industrial Boulevard and on Patrick Avenue from Tennyson Road and Schafer Road. Staff recommends complete street improvements that will widen the bike lane on Huntwood Avenue and install Patrick Avenue's first bicycle facility, install a painted buffer separating the vehicular travel lane and the bicycle lane, reduce each direction to one vehicular travel lane, install a center turn lane, and maintain parking.

## **ECONOMIC IMPACT**

Active transportation options like bicycling and walking foster economic health by creating dynamic, connected communities with a high quality of life that helps support small business development, decreases transportation and healthcare costs, and increases property values, employment, and tourism. Providing alternate modes of travel reduces single lane occupancy vehicles, 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, thus creating positive economic and health benefits and reduction of greenhouse gas emissions.

## **FISCAL IMPACT**

There is no direct fiscal impact for the City to approve the implementation of the Huntwood and Patrick Avenues Complete Streets Improvement Projects.

## **STRATEGIC ROADMAP**

This agenda item supports the Strategic Priority of Preserve, 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 for a balanced multi-modal system of transportation facilities and services in Hayward.

The plan will be a comprehensive effort that will guide, prioritize, and implement a network of quality bicycle and pedestrian facilities to improve mobility, connectivity, public health, physical activity, and recreational opportunities. 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**

Staff conducted public outreach for the improvements on both corridors. Over 3,600 postcards were mailed to addresses in the vicinity of the Huntwood Avenue project and over 3,600 postcards to addresses in the vicinity of Patrick Avenue project for a total of over 7,200 postcards sent to the public. The postcard included details on how to submit feedback on the proposed project and a link to the project webpage for more information.

Information was advertised through various social media forums – Instagram, Facebook, Twitter, and Nextdoor. The mailers and social media posts included details on how to submit feedback on the proposed project and a link to the project webpage for more information. The public was advised to email feedback for the Huntwood Avenue and Patrick Ave Traffic Calming Improvements to [HuntwoodFeedback@hayward-ca.gov](mailto:HuntwoodFeedback@hayward-ca.gov) and [PatrickFeedback@hayward-ca.gov](mailto:PatrickFeedback@hayward-ca.gov), respectively. On August 13, 2020, information on the Traffic Calming Projects was advertised on the City's Instagram handle and Facebook page. Approximately every other day beginning August 13, 2020, tweets of the Huntwood

Avenue Traffic Calming project and the Patrick Avenue Traffic Calming project were tweeted from the City's Twitter account. On August 14, 2020, an article in the Hayward Stack was published and emailed to the approximately 70,000 subscribers on the distribution list and information was posted on Nextdoor in the corresponding neighborhoods from the City's account.

**NEXT STEPS**

Late September 2020	Complete repaving of Huntwood Avenue and Patrick Avenue
October 2020	Restripe Huntwood Avenue and Patrick Avenue

*Prepared by:* Shabnam Yari, Associate Transportation Engineer  
Charmine Solla, Senior Transportation Engineer

*Recommended by:* Alex Ameri, Director of Public Works

Approved by:



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Kelly McAdoo, City Manager