



**DATE:** September 29, 2020

**TO:** Mayor & Council

**FROM:** Director of Public Works

**SUBJECT:** 2020 Bicycle and Pedestrian Master Plan: Adopt a Resolution Accepting the Hayward 2020 Bicycle and Pedestrian Master Plan

### **RECOMMENDATION**

That Council adopts a resolution (Attachment II) accepting the City's 2020 Bicycle and Pedestrian Master Plan.

### **SUMMARY**

The 2020 Bicycle and Pedestrian Master Plan (BPMP) updates and replaces the City's 2007 Bicycle Master Plan. The BPMP includes both a bicycle and pedestrian emphasis and sets forth detailed goals and objectives that provide an accessible, safe, convenient, and integrated system promoting both walking and biking in the Hayward community.

Extensive public outreach was undertaken during the preparation of the BPMP. The goal of the comprehensive outreach was to inform community members of the BPMP, offer ways for individuals to comment on existing bicycle and pedestrian infrastructure, and allow community members to give feedback on where they would like new opportunities to walk or bike.

The BPMP represents a comprehensive citywide effort that will be used to guide, prioritize, and implement a network of quality bicycle and pedestrian facilities to improve mobility, connectivity, public health, physical activity, and recreational opportunities. The BPMP seeks to increase transportation options, reduce environmental impacts of the transportation system, and enhance the overall quality of life for Hayward residents, visitors, shoppers, and commuters. The BPMP provides for both near-term and long-term investment infrastructure solutions to support the BPMP's vision and goals, as well as programmatic, education, and enforcement recommendations.

## BACKGROUND

The 2020 Bicycle and Pedestrian Master Plan (BPMP) provides short-term and long-term vision, and direction for active transportation and recreation in the City. The City adopted its first bicycle plan in 1979. Due to scarce funding, only a few of the recommended facilities within that plan were constructed. In 1997, the City adopted a Bicycle Master Plan, which updated the 1979 plan, proposed a more complete bicycle network, updated the bicycle design standards to current design standards, and established a funding and phasing strategy to implement the plan. Most of the recommended projects identified in the 1997 Bicycle Master Plan have been implemented within ten years after it was adopted. The 2007 Bicycle Master Plan built upon the foundation of the 1997 Bicycle Master Plan and provided an updated inventory of the City's bicycle paths, bicycle lanes and bicycle routes.

The 2007 Plan contained an updated list of proposed bikeways and bicycle support facilities; projects no longer under consideration were eliminated from the list, while some new projects were added to the list. The plan improved connections to neighboring communities and the regional bicycle network.

Most of the bicycle facility improvements identified in the 2007 plan have been completed. Accordingly, it is the appropriate time to plan for future bicycle facilities and launch the City's first pedestrian master plan. Although the City continues to implement multiple projects that enhance the pedestrian infrastructure, such as sidewalks and curb ramps, a pedestrian master plan provides a blueprint for staff to implement projects as part of a coordinated strategy. The 2020 BPMP updates and replaces the City's 2007 Bicycle Master Plan and inaugurates the City's first Pedestrian Master Plan. The BPMP includes both a bicycle and pedestrian emphasis and sets forth detailed goals and objectives that provide an accessible, safe, convenient, and integrated system promoting both walking and biking in the Hayward community. The plan provides clear, implementable recommendations for development of safe and convenient transportation options that serve the needs of all residents and visitors to the City and recommends best ways to seamlessly incorporate and integrate the BPMP's proposed bicycle and pedestrian facilities into Capital Improvements Program (CIP) projects and new developments. Moreover, grant applications are generally more competitive when a project or need is identified in a current Master Plan. A current Master Plan in most of these grant applications is defined as a Plan that was adopted within the last five (5) years.

The BPMP supports and shares vision and goals identified by the City. The 2040 General Plan provides the long-term vision and goals that serve as the foundation for updating the BPMP. This BPMP will specifically support the General Plan Guiding Principle 7: *Hayward residents, workers, and students should have access to an interconnected network of safe, affordable, dependable, and convenient transportation options.* 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.

The BPMP supports and builds upon the Complete Streets Strategic Initiative adopted in 2013. The purpose of the Complete Streets strategy is to build streets that are safe, comfortable, and convenient for travel for everyone, regardless of age or ability, including motorists, pedestrians, bicyclists, and public transportation riders.

Additionally, the BPMP directly supports Council adopted Strategic Priority of Improving Infrastructure through reducing traffic and improving our roads, transit, and active transport options.

A public engagement plan was also devised and initiated early in the development process. This created a community-driven approach to define the vision, goals, objectives, policies and recommended changes to the bicycle and pedestrian networks. The BPMP process included a comprehensive outreach approach geared in part to addressing potential concerns from the development community, general public, and City leaders.

On October 25, 2017<sup>1</sup>, Staff requested the Council Infrastructure Committee (CIC) to review and provide feedback on the projects proposed scope of work. Per the recommendations of the Committee, staff modified the scope of work to include the following: development of an interactive project website that will enable staff to provide periodic updates and allow public to comment on specific locations/areas, up to three walk/bike tours to gather specific input, and the establishment of a Technical Advisory Committee (TAC), comprised of key stakeholders and members of the community.

On September 7, 2018, staff from multiple departments, including Public Works, Environmental Services, and Planning, participated in an interview to assess how the City is implementing existing policies, programs, and practices. The City identified policies, programs, and practices to improve conditions for residents and visitors who walk and bike in the City. The interviews focused on five main categories of program and policy recommendations: infrastructure and operations, evaluation and planning, funding, project implementation, and education and enforcement.

## **DISCUSSION**

The 2020 BPMP is 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 BPMP 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. To update the 2007 Bicycle Master Plan and address Council's strategic initiatives, Hayward executed a Professional Services Agreement with Kittelson & Associates, Inc.

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<sup>1</sup> <https://hayward.legistar.com/LegislationDetail.aspx?ID=3194411&GUID=16200C70-C49D-4F0B-82E1-E9E0EEFD4AF&Options=&Search=>

The overall format of the BPMP has been structured into four parts by grouping similarly oriented tasks. These parts include:

**1. Existing Conditions Analysis:**

Foundation for the plan by understanding the existing conditions was created. As part of this process, existing bicycle and pedestrian counts, collision data, US Census data, and the California Household Travel Survey is analyzed to develop baseline data. This phase initiated the public engagement process that provided an effective and efficient way of gathering community input. This part includes data on who is riding and walking in Hayward based on gender, race, and income and their corresponding destinations. This helps indicate who is affected the most by inadequate or gaps in pedestrian and bicycle facilities.

**2. Needs Analysis:**

A Level of Traffic Stress (LTS) map to overlap the existing facilities map was created to determine the inadequate facilities and gaps in the pedestrian and bicycle network. Consequently, project recommendations were developed using the American Association of State Highway Officials (AASHTO) for all ages and abilities network. The recommended network meets the criteria from the AASHTO Guide to focus on providing bikeways that will allow the largest segment of the population to feel comfortable while walking or biking.

**3. Project and Program/Policy Recommendations and Prioritization:**

Criteria to evaluate and prioritize the identified improvements from Part 2: Needs Analysis was created and corresponding project cost estimates and potential funding sources for the projects were determined. City Staff from multiple departments were interviewed to assess the City's current policies. Current and desired policies were then ranked.

**4. Documentation:**

The result is a concise, graphically rich, and user-friendly summary document for formal City approval to be used when applying for future active transportation grants. Grant applications are generally more competitive when a project or need is identified in a current Master Plan. A current Master Plan is defined as a Plan that was adopted within five (5) years.

Building the framework for the bicycle network began by compiling community feedback, projects that are already planned, a gap analysis, and an evaluation of key destinations and barriers from Part One: *Existing Conditions Analysis* and Part Two: *Needs Analysis*, as described above. Ultimately, the goal was to create a low-stress network to expand the City's existing bicycle network so that more people feel comfortable and safe making trips via bikes for commutes, errands, and recreation. Part Three: *Project and Program/Policy Recommendations and Prioritization* section, as described above, includes the prioritization framework that was used to identify candidate pedestrian and bicycle project locations. The prioritization criteria were developed in cooperation with the TAC and align with the BPMP's goals. The evaluation methodology to develop the prioritization criteria was based on national best practices and input from the TAC. The factors were given the weights to

emphasize safety and connectivity. Prioritization scores were based on the following weights: 33% for safety, 22% for connectivity, 17% for social equity, 17% for health, and 11% for public input. These weights were used to calculate priority scores for all road segments in the city grouped by pedestrian and bicycle prioritization.

Pedestrian facility recommendations were developed based on the functional roadway classification: local, collector, or arterial streets. A high-cost and low-cost improvement assumption was generated for each roadway classification to account for varying levels of possible investments where the same order of magnitude of improvements may not be required or where pedestrian improvements were not identified during the project development and public engagement phase of the project.

Based on financial realities, implementation of the proposed network and programs will occur over time, dependent on available funding sources, and leveraging funding sources will help to realize solutions. The BPMP provides an overview of potential costs, prioritizes projects based on implementation timelines, and identifies funding sources to move investments forward.

The BPMP represents a comprehensive citywide effort that will be used to guide, prioritize, and implement a network of quality bicycle and pedestrian facilities to improve mobility, connectivity, public health, physical activity, and recreational opportunities. The BPMP seeks to increase transportation options, reduce environmental impacts of the transportation system, and enhance the overall quality of life for Hayward residents, visitors, shoppers, and commuters. The BPMP provides for both near-term and long-term investment infrastructure solutions to support the BPMP’s vision and goals, as well as programmatic, education, and enforcement recommendations.

In summary, the BPMP recommends a total of 153 miles of new bicycle facilities for a total approximate low-cost solution of \$21.8M and a high-cost solution of \$43.3M. The low-cost estimate assumes that only low-cost improvements are used in implementing a Class IV separated bicycle lane, such as signing, striping, and temporary vertical barriers such as flexible bollards. The high-cost estimate assumes that all recommended Class IV separated bicycle lanes are implementing using high-cost infrastructure, such as concrete curbs and landscape barriers. **Table 1** is a breakdown of the recommended bicycle investments of the lengths and approximate costs for each facility type.

**TABLE 1. RECOMMENDED BICYCLE INVESTMENTS BY FACILITY TYPE**

Facility Type	Proposed Miles	Approximate Cost
Class I Multi-Use Path	32 miles	\$13,245,156
Class II Bicycle Lanes	35 miles	\$1,214,100
Class III Bike Boulevards (sharrows)	18 miles	\$709,365
Class IV Separated Bike Lanes	68 miles	~
Low-Cost	~	\$6,634,320
High-Cost	~	\$24,069,155
<b>TOTAL BICYCLE RECOMMENDATIONS</b>	<b>153 miles</b>	<b>\$21.8M - \$43.3M</b>

## **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 fiscal impact to adopting the 2020 Bicycle and Pedestrian Master Plan and thus, there is no impact to the City's General Fund or other funds currently. The BPMP will be used as a guidance for incorporating bicycle and pedestrian improvements into design and existing programs. Implementation of projects within the BPMP which requires funding in the future will return to Council for separate approvals.

## **STRATEGIC ROADMAP**

This agenda item supports the Strategic Priority of Improve Infrastructure. Specifically, this item relates to the implementation of the following project(s):

Project 8.                    Implement the Bicycle and Pedestrian Master Plan

## **SUSTAINABILITY FEATURES**

The adoption of this BPMP 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 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**

A public engagement plan was developed and initiated early in the development process. This created a community driven approach to define the vision, goals, objectives, policies, and recommended changes to the bicycle and pedestrian networks.

The TAC consisted of representatives from various departments: Public Works, Planning, Economic Development, Maintenance Services, Police, and Fire, as well as key external stakeholders: AC Transit, BART, Caltrans District 4, City of San Leandro, City of Union City,

Alameda County Public Works, Alameda County Transportation Commission, Bike East Bay, Hayward Unified School District, HARD, Chamber of Commerce, United Merchants Downtown Hayward, and the Community Resources for Independent Living (CRIL). Five TAC meetings have taken place with the final TAC meeting being held remotely through video conference on May 29, 2020.

TAC Meeting	Date
#1	6/12/18
#2	10/19/18
#3	4/9/19
#4	10/22/19
#5	5/29/20

Consultants and Public Works Staff held several Pop-Up Events where the Public could provide comments and feedback regarding improvements and concerns.

Pop-Up Event	Date
Summer Movies on the Plaza	6/29/18
All-American Festival	6/30/18
Downtown Hayward Street Party	7/19/18
Earth Day Festival	4/26/19
Bike to Work Day	5/9/19

Additionally, outreach included three (3) well-attended Bike-Walk Audits. The audits had Spanish translation and interpretation, with presentations were provided in English and Spanish.

Bike-Walk Audits	Date
South Hayward Tennyson Road Corridor	9/21/18
Downtown Hayward	12/1/18
Hesperian Boulevard – Chabot College	1/24/19

Comments and feedback were also solicited online. The project has a webpage on the City website which provided access to an online interactive WikiMap open from May 2018 to November 2019. Events and links to the map were advertised through Social Media and were included in the July 2018 issue of the Hayward Stack. Links to the BPMP Administrative Draft were posted on the project webpage in May 2020 and included in the May 2020 issue of the Leaflet and the June 2020 issue of the Hayward Stack.

Staff presented the Administrative Draft to the CIC on January 22, 2020 and to the Planning Commission on July 9, 2020. The consensus from CIC was an appreciation for the level of effort that went into public outreach and analyzing existing demographics of bicyclists and pedestrians. The CIC supported the bicycle facilities recommendations and encouraged Staff to take advantage of low-cost improvements, such as signal timing change. However, the CIC was split regarding hiring an additional Transportation Staff member dedicated to bicycle and

pedestrian work. The Administrative Draft BPMP was presented to the Planning Commission in July 2020 during the Governor’s shelter-in-place order. The Planning Commission overwhelmingly expressed their gratitude for the recently installed Class IV Separated Bicycle Lanes on Mission Boulevard after having tried it while sheltering in place. The Planning Commission supported the idea of hiring a dedicated bicycle and pedestrian staff employee and in the words of Planning Commissioner Chair Bonilla “an additional and dedicated staff member is a good investment and practically pays for itself” while pointing out that the additional staff will have more time to spend applying for transportation grants.

**NEXT STEPS**

*January 2021* Present policies for ADA Checklist and Road Configuration Checklist and Implementation for Council Adoption

*Prepared by:* Charmine Solla, Senior Transportation Engineer  
Fred Kelley, Transportation Manager

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

*Approved by:*



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Kelly McAdoo, City Manager