

## Scope of Work

Our proposed work plan includes:

1. Our approach for each task in the bicycle and pedestrian plan development
2. Activities to be undertaken and who will perform them
3. The technical and procedural innovations that we bring to this planning process

The City provided a comprehensive list of deliverables in the request for proposal, and therefore we have not repeated them in this proposal. We will provide all of the listed deliverables as part of this project.

### Task 1 Project Management

**Task Lead:** Amanda Leahy, Kittelson

#### 1.1 Project Work Plan and Schedule

**Approach/Activities:** Develop, refine project work plan and schedule at the onset of the project. Prepare for and conduct a kick-off meeting. Maintain the project schedule throughout the duration of work activities.

#### 1.2 Project Kick-Off Meeting & Bi-Weekly Check-Ins

**Approach/Activities:** We will conduct bi-weekly project management meetings with the City. Prior to these meetings, we will identify discussion topics and provide a draft agenda to the City. We will provide summaries of action items and decisions made as part of these meetings.

### Task 2 Baseline Mapping & Existing Conditions Analysis

**Task Lead:** Matthew Braughton, Kittelson

For this task, we will build on the data collection and processing conducted as part of the Alameda Countywide Bicycle and Pedestrian Plans Update.

#### 2.1 Collect & Process GIS Data

**Approach/Activities:** We will review available GIS data provided by the City related to roadway infrastructure characteristics for bicyclist and pedestrian safety and comfort. This includes reviewing the datasets on the Open Data portal such as the Hayward Bicycle Map (see figure above), Public Works Capital Improvement Plan Fiscal Year 2016 Pavement Rehabilitation, and Hayward Street Centerlines.

We will identify data gaps and work with the City staff to develop an approach to collecting missing data. Missing data will be collected as part of Optional Task

11.A, if needed. Matthew will format and code all relevant data for consistency and use in the bikeway and pedestrian network mapping.

### 2.2 Low Stress Bicycling Network Coverage Analysis

**Approach/Activities:** We will utilize GIS data collected and cleaned in Task 2.1 to develop a LTS map for the City. We will leverage experience conducting several concurrent studies across Alameda County, including several at the local jurisdictional level, within the Multimodal Arterials Plan, and TDG's forthcoming analysis for the unincorporated county active transportation plan. We will review and integrate the methodologies used for these varied projects to develop an appropriate application for the City's context and data availability. The LTS analysis will provide a key input into the bicycle network development process.

### 2.4 Analysis of Count & Demographic Data

**Approach/Activities:** We will review existing bicycle and pedestrian count data from sources such as traffic impact studies, regional/countywide count programs, US Census data, the California Household Travel Survey, and Bay Area Rapid Transit Station Access Surveys. The data will be summarized to identify relative activity-levels for bicycling and walking throughout the city. Using this information, we will develop a strategy for bicycle and pedestrian data collection that will enable the City to measure baseline data and forecast benefits for grant applications.

### 2.5 Draft Existing Conditions Memo

**Approach/Activities:** We will prepare a draft existing conditions memo to summarize the approach and results for Tasks 2.2 through 2.4. The results will be summarized using maps, infographics, and concise, clear text to capture the state of current walking and biking in the city.

The City will review the draft memo and one consolidated set of comments will be incorporated into the final plan document (Task 10).

### Task 3 Program & Policy Recommendations

**Task Lead:** Brooke DuBose, TDG

#### 3.1: Assess Existing Program Status & Best Practice Scan

**Approach/Activities:** We will review current City programs and policies identified in the Hayward 2040 General Plan, 2007 Bicycle Master Plan, Complete Streets Policy, and other relevant documents to develop an inventory of existing bike- and pedestrian-related programs and policies.

**Technical/Procedural Innovations:** We will interview City staff and other City agency stakeholders to document and build from existing practices and programs in coordinating and implementing bicycle and pedestrian projects.

### 3.2: Develop Program & Policy Recommendations

**Approach/Activities:** We will use information from the interview and literature review (Task 3.1) to provide recommendations and develop targeted actions for implementing the bicycle and pedestrian plan. The recommendations will consist of improvements to existing programs and policies that should be continued, and identify programs and policies the City should initiate to achieve the project goals identified as part of Task 4.1 Vision & Goals.

### Task 4 Vision, Goals & Public Engagement

**Task co-Lead:** Amanda Leahy, Kittelson and Brooke DuBose, TDG

#### 4.1 Vision & Goals

**Approach/Activities:** We will establish the long-range vision and goal statement for the pedestrian and bicycle plan consistent with existing plans (e.g., Mobility Element of the General Plan) and policies (e.g., Complete Streets Policy). A key theme will be making walking and biking a safe and viable transportation option in areas of high activity and demand, such as the downtown, industrial areas with high concentrations of research & development employment, and near schools. We will also identify performance measures and feasible ways for the City to track their progress towards the established vision and goals set.

#### 4.2 Public Engagement

**Approach/Activities:** The project's communications and public engagement strategy is central to ensuring broad community participation and establishing a community-driven approach to define the plan's vision, goals, objectives, policies, and recommended changes to the bicycle and pedestrian networks.

We will prepare a public engagement plan that will provide an effective and efficient way of gathering meaningful information. The budget assumes up to five in-person meetings/events and up to four walk and/or bike audits. These activities are supplemented by online, web-based opportunities for the community to provide input, as well as development of a project website (previously Optional Task 11.B). Translation and interpretation services will be provided, as needed. We will also

prepare up to two presentations for relevant City Council subcommittees (these are included under Task 5.3 and Task 6.3). Additional information about our public engagement strategy can be found in Section 8.

**Technical/Procedural Innovations:** The online mapping tool prepared by Kittelson for the Placer County Transportation Planning Agency Regional Bikeway Plan Update can be explored here: <http://maps.kittelson.com/PCTPA-BMP>

### Task 5 Bikeway Network Recommendations

**Task Lead:** Brooke DuBose, TDG

### Task 6 Pedestrian Network Recommendations

**Task Lead:** Erin Ferguson, Kittelson

#### Subtask Activity

#### 5.1 Develop Bicycle Collision Profiles

##### 6.1 Develop Pedestrian Collision Profiles

Work from Task 2.3 High Injury Network to develop specific collision profiles to inform projects, policies, and programs.

#### 5.2 Update Proposed Bikeway Network Mapping

Build upon the 2007 Bicycle Plan network map to include bicycle facilities and trails completed since 2007. Use the goals identified in Task 4, and the LTS map created in Task 2.2 to create recommendations to address gaps or needs in the bikeway network.

#### 6.2 Pedestrian Network Recommendations

Building upon the existing conditions analysis (Task 1) and detailed collision analysis (Task 6.1) and referencing pedestrian network goals identified in Task 4, develop recommendations to address needs in the existing pedestrian network.

#### 5.3 Agency and Public Feedback

##### 6.3 Agency and Public Feedback

In-person and online outreach with the public, key stakeholders, and agency staff. Specific engagement approach (e.g., location, format, timing) for these meetings will be defined in the public engagement strategy prepared in Task 4.2. For budgeting purposes, each task (Task 5.3 and 6.3) assumes preparation of meeting materials and presentation at one Council Infrastructure Committee meeting (two meetings/presentations total).

#### 5.4 Finalize Bicycle Network Recommendations

##### 6.4 Finalize Pedestrian Network

#### Recommendations

Review and catalog agency and public feedback and present a set of recommended network

changes to City staff, based on this feedback. Prepare a final proposed bikeways map and set of pedestrian network recommendations along with a summary of public and stakeholder feedback.

### Task 7 Bicycle & Pedestrian Network Prioritization

**Task Lead:** Matthew Braughton, KAI

#### 7.1 Define Prioritization Framework

**Approach/Activities:** Our team will tailor the lessons learned from other prioritization and performance measure guidebooks and apply them to the City's needs in developing a prioritization framework for the bicycle and pedestrian master plan.

Based on the plan's objectives, available data, and funding priorities, we will consider performance categories, such as safety, demand, connectivity, stakeholder input, existing conditions, opportunities and constraints, and compliance. Working with the City, we will identify the relevant factors and the criteria to be used for evaluating them. Particular attention will be paid to criteria that help inform projects relative to funding requirements and programming needs.

#### 7.2 Draft Prioritization Analysis & Review

**Approach/Activities:** We will apply the prioritization factors and criteria defined in the prioritization framework (Task 7.1). Evaluation criteria results will be mapped individually for City review. Our team will work with City staff to establish initial weighting for the factors.

Based on these weightings, we will normalize the criteria scores and combine the factors to develop the draft combined prioritization scoring. We will determine high, medium, and low priority tiers. All prioritization criteria and combined scoring will be provided as spreadsheet results, individual and combined criteria maps, and mapped in ArcGIS Online.

#### 7.3 Final Prioritization

**Approach/Activities:** We will gather feedback on the draft prioritized list of improvements from City staff. Based on this feedback, we will finalize evaluation criteria results and update the prioritized list of bicycle and pedestrian improvements. We will prepare a technical memorandum documenting the prioritization methodology and results.

### Task 8 Engineering & Design Guidance

**Lead:** Robert Burchfield, TDG

### 8.1 Develop Design Guidance for Pedestrian & Bicycle Facilities

**Approach/Activities:** We will review the City's current design guidelines and work with the City staff to understand how the design guidelines and standards are currently used, where there are gaps, and what supplemental guidance and material would be most helpful.

### 8.2 Develop Guidance for Accommodating Bicycles & Pedestrians through Construction Zones

**Approach/Activities:** We will supplement guidance in Chapter 6 of the California Manual on Uniform Traffic Control Devices to specify when and where pedestrian and bicycle facilities may be relocated, detoured, modified and closed in the City. The guidance applies to any entity performing construction work that results in blockage of a sidewalk, bike lane, or travel lane and is intended to direct developing the traffic control plan.

### Task 9 Cost & Revenue Estimates

**Task Lead:** Conor Semler, Kittelson

For this task, we will utilize the methodology developed for the Alameda Countywide Bicycle and Pedestrian Plans Update.

#### 9.1 Cost Estimation Approach

**Approach/Activities:** Using current data and information (e.g., unit cost information from actual project bid documents provided by the City) and relevant references (e.g., ACTC Active Transportation Network Cost Estimating tool and Cost Estimating Guide), we will develop conceptual cost estimates for the proposed network improvements.

#### 9.2 Cost & Revenue Estimates

**Approach/Activities:** We will review county, regional, state and federal funding sources and produce a technical memo that will provide the City with options to fund the updated programs and projects. We propose to provide ongoing support for grant applications and project funding and implementation as part of Optional Task 11.F.

### Task 10 Final Plan Documents

**Task Lead:** Amanda Leahy, Kittelson

#### 10.1 Draft Plan Document(s)

**Approach/Activities:** We will develop a concise, graphically rich, and user-friendly document(s) to summarize the relevant results of the preceding tasks. In addition to the plan document, we propose to create an executive summary overview of each section, and a technical appendix primarily

comprised of the technical memo from the previous tasks to keep the plan focused and brief. Topic areas extraneous to the City's primary effort but needed to meet ACTC's Bicycle Master Plan Guidelines will be moved to appendices.

## 10.2 Council Feedback

**Approach/Activities:** We will create a presentation of the draft plan for the City Council.

## 10.3 Final Plan Document(s)

**Approach/Activities:** We will finalize the plan based on received input and prepare written responses to comments for City records. We will submit the final plan and all supporting technical analysis and documentation for the City's records.

Tasks		
11.G	Environmental Documentation Support	Provide guidance on strategies for California Environmental Quality Act compliance for both adoption and implementation of the Citywide Bicycle and Pedestrian Master Plan.

## Task 11 Optional Tasks

Tasks		
11.A	Additional Data Collection to Facilitate Network Analysis & Mapping	Allow for additional data collection to support GIS mapping and analysis (Task 2).
11.C	Additional Stakeholder Meetings & Public Engagement Efforts	Support enhanced/expanded public engagement efforts. Sample events are detailed in Section 8 Public Outreach of this proposal.
11.D	Community Survey	Preparation and execution of a citywide survey on walking and biking.
11.E	Concept Designs for Identified Bikeway & Pedestrian Network Improvements	Expedite plan implementation by completing the evaluation and design of priority projects.
11.F	Support for Grant Applications, Project Funding & Implementation	Expedite plan implementation by completing grant applications for priority projects.

## List of Tasks and Milestones/Deliverables

Task (Task Lead/Firm)	Deliverables		City Role/ Responsibility
TASK 1 Project Management (Amanda Leahy, AICP / Kittelson)			
1.1 Project Work Plan and Schedule	1.1a	Detailed project work plan to be prepared prior to the project kick-off meeting	Review/Comment
	1.1b	Schedule and associated updates throughout project duration	Review/Comment
	1.1c	Action item log recording items completed, upcoming (including status), and deadlines	Review/Comment
1.2 Project Kick-Off Meeting and Bi-Weekly Check-Ins	1.2a	Project kick-off meeting (in-person)	Participate
	1.2b	Bi-weekly check-in calls or in-person meetings	Participate
	1.2c	Agendas and summary of action items and decisions made at the meetings	Review/Comment
TASK 2 Baseline Mapping and Existing Conditions Analysis (Matthew Braughton / Kittelson)			
2.1 Collect & Process GIS Data	2.1a	Updated, consistent database(s) for pedestrian and bicycle inventory data	Provide Data
2.2 Low Stress Bicycling Network Coverage Analysis	2.2a	Draft and Final LTS maps for the City of Hayward	Review/Comment
	2.2b	Technical memorandum documenting method and assumptions	Review/Approve
2.3 High-Injury Corridor Analysis	2.3a	Maps displaying the high-injury corridors for pedestrian and bicyclists	Review/Comment
	2.3b	Summarize collision data and analyze crash trends	Review/Comment
2.4 Analysis of Count Data and Demographic Data	2.4a	Description of walking and biking trends for existing conditions memorandum	
	2.4b	Description of relationship and coordination with other plans	
2.5 Draft Existing Conditions Memo	2.5a	Draft Existing Conditions Memo for City of Hayward Project Manager/Staff Review	Review/Comment
	2.5b	Final Existing Conditions Memo	Review/Approve
TASK 3 Program & Policy Recommendations (Brooke DuBose, AICP / TDG)			
3.1 Assess Existing Program Status and Best Practice Scan	3.1a	Supporting technical memo summarizing existing program status and best practices	Provide Data
3.2 Develop Program and Policy Recommendations	3.2a	Draft Program and Policy Recommendations for review by City staff	Review/Comment
	3.2b	Final Program and Policy Recommendations	Review/Approve
TASK 4 Vision & Goals / Public Engagement (Amanda Leahy, AICP / Kittelson & Brooke DuBose, AICP / TDG)			
4.1 Vision & Goals	4.1a	Updated vision and goals for the pedestrian and bicycle plan	Review/Comment
	4.1b	Performance measures for plan implementation	Review/Comment
	4.1c	Conduct community meetings (not included in RFP scope, optional task)	Participate
4.2 Public Engagement	4.2a	Draft and Final Public Engagement Plan	Review/Comment
	4.2b	Interactive Mapping Tool	Review/Comment
	4.2c	Project Website	Review/Comment
	4.2d	Up to 5 in-person meetings and events	Review Materials, Participate
	4.2e	Up to 4 walk and/or bike audits	Review Materials, Participate
	4.2f	Presentations to advisory committees/commissions	Help Form Advisory Committee, Review Materials, and Participate in Meetings
	4.2g	Public feedback documentation and summary	Review/Comment
TASK 5 Bikeway Network Recommendations (Jessica Zdeb, AICP / TDG)			
5.1 Develop Bicycle Collision Profiles	5.1a	Collision profile summary by City and by high-injury corridor	Review/Comment
	5.1b	Initial list of treatments/topics for engineering and design guidance	Review/Comment
	5.1c	Develop short-term and long-term strategies/projects	Review/Comment
	5.1d	Technical memo summarizing method	Review/Approve
5.2 Update Proposed Bikeway Network Mapping	5.2a	Draft 1 updated bikeway network map	Review/Comment
5.3 Agency & Public Feedback	5.3a	Up to three (3) in-person meetings to discuss draft bikeway mapping	Participate/Schedule
	5.3b	Prepare materials and presentation for Council Infrastructure Committee (or other committee)	Participate

Task (Task Lead/Firm)	Deliverables		City Role/ Responsibility
	5.3c	Summary of input received through public and stakeholder engagement process	Review/Comment
	5.3d	Draft 2 updated bikeway network map	Review/Comment
5.4 Finalize Proposed Bikeways Mapping	5.4a	Final proposed bikeways map	Review/Approve
	5.4b	Catalog of public and stakeholder feedback	Review/Comment
<b>TASK 6 Pedestrian Network Recommendations (Erin Ferguson, PE / Kittelson)</b>			
6.1 Develop Pedestrian Collision Profiles	6.1a	Collision profile summary by City and by high-injury corridor	Review/Comment
	6.1b	Initial list of treatments/topics for engineering and design guidance	Provide Input
	6.1c	Develop short-term and long-term strategies/projects	Provide Input
	6.1d	Technical memorandum summarizing method	Review/Approve
6.2 Pedestrian Network Recommendations	6.2a	Draft list of pedestrian improvement projects	Review/Comment
6.3 Agency and Public Feedback	6.3a	Up to three (3) in-person meetings to discuss draft pedestrian improvement projects	Participate/Schedule
	6.3b	Prepare materials and presentation for Council Infrastructure Committee (or other committee)	Participate
	6.3c	Summary of input received through the public and stakeholder engagement process	Review/Comment
	6.3d	Draft 2 updated pedestrian improvement project list	Review/Comment
6.4 Finalize Pedestrian Network Recommendations	6.4a	Final proposed pedestrian recommendations	Review/Approve
	6.4b	Catalog of public and stakeholder feedback	Review/Comment
<b>TASK 7 Bicycle &amp; Pedestrian Network Prioritization (Matthew Braughton / Kittelson)</b>			
7.1 Define Prioritization Framework	7.1a	Draft technical memorandum documenting the prioritization framework to be used	Review/Comment
	7.1b	Final technical memorandum revised based on City staff comments	Review/Approve
7.2 Draft Prioritization Analysis and Review	7.2a	Draft prioritized list of bicycle and pedestrian improvements	Review/Comment
7.3 Final Prioritization	7.3a	Final prioritized list of bicycle and pedestrian improvements	Review/Approve
	7.3b	Supporting technical memorandum documenting prioritization methodology	Review/Approve
<b>TASK 8 Engineering &amp; Design Guidance (Robert Burchfield, PE / TDG)</b>			
8.1 Develop Design Guidance for Pedestrian & Bicycle Facilities	8.1a	Draft design guidance for pedestrian and bicycle facilities for City review and comment	Review/Comment
	8.1b	Final design guidance for pedestrian and bicycle facilities	Review/Approve
8.2 Develop Guidance for Accommodating Bicycles & Pedestrians through Construction Zones	8.2a	Draft design guidance for accommodating pedestrians and bicyclists in construction zones	Review/Comment
	8.2b	Final design guidance for accommodating pedestrians and bicyclists in construction zones	Review/Approve
<b>TASK 9 Cost &amp; Revenue Estimates (Conor Semler, AICP / Kittelson)</b>			
9.1 Cost Estimation Approach	9.1a	Technical memo documenting approach and assumptions in developing the costs	Review/Comment
	9.1b	Inventory proposed capital projects, programs and plans, associated cost estimate, timeline	Provide Info
9.2 Cost and Revenue Estimates	9.2a	Draft technical memorandum documenting cost and revenue estimates for City review and comment	Review/Comment
	9.2b	Final technical memorandum documenting cost and revenue estimates	Review/Approve
<b>TASK 10 Final Plan Documents (Amanda Leahy, AICP / Kittelson)</b>			
10.1 Draft Plan Document(s)	10.1a	Summary of input from agency stakeholders on desired format of Draft Plan(s)	Review/Comment
	10.1b	Annotated Outline(s) for Draft Plan(s)	Review/Comment
	10.1c	Draft Plan(s) for Review by City of Hayward Staff	Review/Comment
	10.1d	Draft Plan(s) for Council Feedback	Review/Comment
10.2 Council Feedback	10.2a	Presentations of Draft Plan(s)	Participate
	10.2b	Summary of input received from City Council	Review/Comment
10.3 Final Plan Document(s)	10.3a	Final Plan(s)	Review/Approve
	10.3b	Written response to comments received	Review/Approve
	10.3c	Electronic files, hard copies, GIS, etc.	Store/File



TASK 11 Optional Tasks (Kittelsohn & TDG)		
A	Additional data collection to facilitate network analysis and mapping	
	(relocated to Task 4.2, see deliverable 4.2c)	
C	Additional stakeholder meetings and public engagement efforts	
D	Community survey	
E	Concept designs for identified bikeway and pedestrian network improvements	
F	Support for grant applications, project funding, and implementation	
G	Environmental documentation support	