

Work Plan

Task 1 Plan Development

TASK 1.A PROJECT INITIATION

Task 1.A.1 Project Initiation

The Alta team will plan and facilitate a project kick-off meeting to clarify the project scope, background, and objectives. Recommended objectives for the kick-off meeting include:

- Introductions
- Establish communication channels and protocols
- Confirm or refine the scope of services
- Discuss project schedule and deliverables
- Review project objectives
- Review available guidelines and other related materials
- Prepare and conduct initial review of data needs
- Discuss overall expectations

We anticipate that in addition to City staff attendance, Circlepoint and Kimley-Horn will attend the meeting so we can effectively coordinate outreach strategies and roles.

Task 1.A.1 Deliverables

- Project Kick-Off Meeting, Agenda and Notes

Task 1.A.2 Ongoing Meetings

Throughout the project, there will be ongoing coordination between the Alta team and Livermore City staff. Alta's Project Manager, Alex Sweet, and Principal, Jennifer Donlon Wyant, will be in regular communication with the City Project Manager—including email, phone and written communications.

We propose to hold bi-weekly team call meetings to ensure the project stays on schedule, on budget and continues to meet City expectations. Alta will also be available for in person meetings. These meetings will include administrative topics and discussion of project deliverables including progress and initial project ideas.

In addition to the bi-weekly calls, Alta will provide monthly project status reports that will include:

- Task deliverable status, budget spent, budget remaining
- Schedule status
- Deliverables submitted
- Deliverables to be submitted in the next month

Task 1.A.2 Deliverables

- Bi-weekly team calls
- Two to three in-person working session meetings
- Monthly project status updates

TASK 1.B PUBLIC PARTICIPATION

Task 1.B.1 Preparation of Public Participation Plan

The Livermore community will play a key role in understanding the existing conditions and developing recommendations. As a first step, Alta and Circlepoint will work closely with City staff and the Plan team to develop a comprehensive Public Participation Plan (PPP) that will guide outreach activities through the duration of the Plan process. The PPP will identify key goals, project milestones, audience types, and communications tools, and then organize these concepts into a schedule of activities. Circlepoint has extensive experience creating PPPs that are thoughtful and actionable. Our team will be careful to ensure that opportunities for underserved communities to provide input are built into the PPP from the beginning, to ensure equal access to plan participation for all members of the community.

The Alta Team will provide the Draft Public Participation Plan for City review. We will revise based on a single set of consolidated, internally consistent comments and submit as the Final Public Participation Plan.

Task 1.B.1 Deliverables

- Draft Public Participation Plan
- Final Public Participation Plan

Task 1.B.2 Conduct Public Outreach

Social Media Outreach

As part of the Public Participation Plan, Circlepoint will include social-media based outreach strategies for implementation by the City.

As part of broad notification efforts for various elements of the Plan, Circlepoint will write social media posts with appropriate links or images for distribution via the City of Livermore's social media accounts. Circlepoint will encourage stakeholders and community organizations with social media accounts to share the notifications.

Circlepoint will also provide content from the project website in the form of a Facebook app, allowing Facebook users to experience most or all of the website's functionality without leaving the Facebook platform. This presents the opportunity for the project website to reach new audiences, or even go "viral" and inspire sharing by interested community members and organizations.

Community Workshops

Alta will hold two (2) community open houses during the Plan process to solicit input from a broad audience of community members. These workshops would typically be held during the evening, and we have found that an "open house" setting with information stations allows participants the greatest flexibility to participate and provide one-on-one input to the Project Team. Alta will provide Spanish interpretation at both workshops.

The first workshop would be held early in the process to explain the planning process, outline the objectives for the plan, and obtain public comments about needs, concerns, and recommendations for bicycling, walking, and trail facilities throughout the city. It is assumed this workshop will be held during the development of Working Paper #1: Administrative Draft Existing Conditions and Needs Analysis. A public survey, discussed later in this section, will be available for workshop attendees.

The second workshop will be held toward the end of the process to present our team's findings and recommendations and obtain public feedback on recommended facility projects and programs. As an optional task the second workshop can be structured as a higher-profile event with invited speakers to celebrate the plan's recommendations and build momentum toward implementation. We understand that a successful Active Transportation Plan will need buy-in from more than just the bicycle advocates.

The Alta team will prepare all visual presentations for the public workshops, including storyboards, graphics, and PowerPoint presentations. We will facilitate each meeting and record the discussions on flip charts. We will provide sign-in, name tags, refreshments, comment cards, and a thorough written meeting summary capturing major points of discussion and detailed public comments. Alta will translate all meeting notices to Spanish.

Targeted / "Pop Up" Outreach

Public outreach needs will evolve throughout the project, and many stakeholders may not have the interest or availability to attend an evening public workshop. Alta has found that an outreach approach that meets stakeholders where they are is an important supplement to the formal workshops. We suggest holding a series of targeted meetings with stakeholders, either through attending existing meetings (like neighborhood groups) or hosting a booth or table at community events. Targeted meetings/"pop-up" events could take place at:

- Livermore Area Youth Advisory Commission
- Livermore Area Recreation and Park District
- Senior Services Center
- Taste of Downtown Livermore
- Weekly Farmers' Market
- Livermore Rodeo

- Tour of California stage

We assume up to six (6) targeted outreach events during the course of the project. Alta will translate all meeting notices to Spanish.

City Council Meetings

Alta will attend up to two (2) Planning Commission meetings and two (2) City Council meetings over the course of the project. Alta will organize a Planning Commission working session and a City Council working session designed to gather Commission input on their vision and goals for this Active Transportation Plan. We will provide the agenda, presentation, material and summary notes. It is assumed these sessions will be held during the development of Working Paper #1: Administrative Draft Existing Conditions and Needs Analysis.

Alta will attend a Planning Commission meeting and a City Council meeting for review of the Draft Plan to receive direction and feedback for the Final Plan.

User Survey

The Alta team will develop a survey to determine the community's general needs and concerns surrounding bicycling, walking and trails. Alta will provide the City with a copy of the survey to be sent out to residents via citywide mailings, the project website, Facebook, NextDoor, at workshops, and be distributed at civic locations such as libraries and local bicycle shops. The user survey will include a bilingual online map, such as a Shareabouts map, where residents and visitors can identify issue and opportunity sites for walking, biking and trail use. Alta will provide a Spanish translation of the survey. The survey will be available at the first public workshop.

Bicycle, Walking and Trail Audit Tours

City staff, the TAC, the CAC, and other stakeholders be invited to participate in up to three, separate tours: bicycling, walking and trails, highlighting key issues and opportunity areas in Livermore. This exercise has proven to be a valuable tool in similar Alta projects. We suggest a van-assisted walking tour for participants who prefer not to bike.

Alta staff will lead the tours and discuss issues and lead a conversation about potential solutions at key problem areas. The Alta team will work with the City to plan the route and identify stopping/discussion points along the way, develop a route map, and provide an itinerary of meeting locations and times. These community tours will allow participants to gain close-up, first-hand knowledge of opportunities and constraints and enabling the group to provide valuable input to the Alta team.

The tour will be held on a weekend morning or afternoon to maximize the ability of public participation.

Task 1.B.2 Deliverables

- Draft Public Participation Plan
- Final Public Participation Plan
- Community Workshop #1 (preparation, presentation materials, summary)
- Community Workshop #2 (preparation, presentation materials, summary)
- Up to six (6) targeted/"pop up" outreach events (preparation, presentation materials, summary)
- City Council Meetings (2) (preparation, attendance, summary as needed)
- User Survey and online mapping tool for public feedback (and summary of results from both)
- Bicycle, Walking and Trail Audit Tours (preparation, presentation materials, summary)

Task 1.B.3 Citizens Advisory Committee Meetings

The Alta team understands the importance of input from the Project Citizens Advisory Committee (CAC). Alta staff will meet with the CAC up to six (6) times over the course of the project to solicit feedback on key deliverables. We anticipate the following meetings:

- CAC Meeting #1 - Kick-Off Meeting: CAC Role
- CAC Meeting #2 – Review Working Paper #1: Draft Existing Conditions and Needs Analysis
- CAC Meeting #3 – Review Working Paper #2: Draft Goals and Objectives
- CAC Meeting #4 – Review Working Paper #3: Draft Recommendations
- CAC Meeting #5 – Review Draft Plan

Our CAC meeting approach will keep the committee informed on project progress and provide the opportunity for valuable input on how the Plan progresses. CAC Meeting #6 is included as a placeholder in the event an additional meeting is needed.

Alta will work with the City to schedule the meetings and communicate with CAC members. Alta will prepare meeting agendas and meeting notes, and share all items with the City. After the City approves the meeting minutes, Alta will post progress from our meetings on the project webpage, described in Task 1.B.5.

Task 1.B.3 Deliverables

- Up to 6 CAC Meetings (agendas, meeting materials, minutes)

Task 1.B.4 Technical Advisory Committee Meetings

The Alta team understands the importance of input from the Project Technical Advisory Committee (TAC). Alta and Kimley-Horn staff will meet with the TAC up to six (6) times over the course of the project to solicit feedback on deliverables. We anticipate the following meetings:

- TAC Meeting #1 – Kick-Off Meeting: TAC Role and Key Issues
- TAC Meeting #2– Review Working Paper #1: Draft Existing Conditions and Needs Analysis
- TAC Meeting #3 – Review Working Paper #2: Draft Goals and Objectives
- TAC Meeting #4 – Review Working Paper #3: Draft Recommendations
- TAC Meeting #5 – Review Draft Plan

Our TAC meeting approach will keep the technical team informed on project progress and provide the opportunity for valuable input on how the Plan progresses. TAC Meeting #6 is included as a placeholder in the event an additional meeting is needed.

Alta will work with the City to schedule the meetings and communicate with TAC members. Alta will prepare meeting agendas and meeting notes, and share all items with the City. After the City approves the meeting minutes, Alta will post progress from our meetings on the project webpage.

Alta understands work with the TAC will include discussion with individual TAC members to discuss issues, concerns and strategies. Alta is available to provide these discussions up to the budget allocated for this task.

Task 1.B.4 Deliverables

- Up to 6 TAC Meetings (agendas, meeting materials, minutes)

Task 1.B.5 Project Webpage

Alta will host a project website for the project, with the web address to be confirmed with City staff (e.g. www.ActiveLivermore.com). The webpage will provide the public and interested stakeholders with a digital, quarterly update of project and contact information. Alta will make webpage updates to announce upcoming meetings and events. The project website will be compatible with the City's website.

Task 1.B.5 Deliverables

- Project website

TASK 1.C RESEARCH AND ANALYSIS

Task 1.C.1 Inventory Existing Plans and Policies

The foundation for a successful Plan will be a comprehensive understanding of existing conditions, including the review of existing planning documents and policies. Alta, supported by Kimley-Horn, will research and summarize relevant planning and policy documents and data resources pertaining to walking, biking, and trail use in Livermore, including the City and County General Plans and City Ordinances. The Alta team will prepare an annotated bibliography listing and of relevant plans, policies, goals and objectives for walking and biking and trail use. This will ensure that the Livermore Active Transportation Plan is consistent with and supports relevant documents. This inventory will be included in Working Paper #1, identified in Task 1.C.3.

The Alta team will review relevant, available documents and resources, including but not limited to:

- City of Livermore General Plan (2003-2025)
- Arroyo Vista Neighborhood Plan (2007)

- Bikeways and Trails Master Plan (2001)
- South Livermore Valley Specific Plan (1997)
- Climate Action Plan (2012)
- Iron Horse Trail Feasibility Study
- Trails Master Plan (2002)
- El Charo Specific Plan
- Downtown Specific Plan (2004)
- Downtown Design Standards
- Design Standards and Guidelines
- BART to Livermore Extension Project
- Livermore Municipal Code
- Livermore Development Code
- City Standard Details and Specifications
- Livermore Area Recreation and Parks District Trails Master Plan
- Toolkit for Improving Walkability in Alameda County (2009)
- Alameda CTC Countywide Bicycle and Pedestrian Plan
- Alameda CTC Bicycle Master Plan Guidelines (2015)
- State climate, energy and transportation plans, policies and goals
- MTC Regional bicycle and pedestrian planning efforts

Any documents, data or information that may be useful but are not available will be listed in a data request memorandum and submitted to the City. If feasible, the City, County, Caltrans, and other key partners will provide these documents to the Alta team on a timely basis for the study.

Deliverable

- Data Request Memorandum
- Content to be included in Working Paper #1: Existing Conditions and Needs Analysis, identified in Task 1.C.3 Deliverables.

Task 1.C.2 Inventory Existing Conditions

Upon review of the information gathered in Task 1.C.1, the Alta team will conduct a field review to verify conditions. The inventory of existing conditions will be including in Working Paper #1, identified in Task 1.C.3.

Inventory of Existing and Proposed Bicycle, Pedestrian, and Trail Facilities

The Alta team will conduct a field review of existing and proposed bicycle, pedestrian, and trail facilities, including surveying key streets and paths on foot or by bicycle identified in consultation with staff. Field investigations will be documented using field notes, taking field measurements with GIS/GPS enabled devices and recorded via the ESRI Collector app and using digital photography. The ESRI Collector app will be used to document the presence and characteristics of bicycle, pedestrian and trail facilities and amenities, including sidewalks, crosswalks, lighting, bikes lanes, and more. The ESRI Collector app data will be directly synced with GIS to produce existing conditions maps and inform demand analyses described in Task 1.C.3. We will put special emphasis on the study of facilities and zones identified in the 2001 Bikeways and Trails Master Plan. Specifics related to inventorying bicycle, pedestrian, and trail facilities are listed below. Field inventory will be augmented by existing datasets.

Alta will update the sidewalk GIS layer to confirm presence of existing sidewalk gaps based on staff input, community input and Alta field review (conducted using the most up-to-date aerial photography).

Bicycle Facility Inventory

A citywide inventory of bicycle facilities will be catalogued digitally and delivered on a study area map and an Excel matrix that includes details for each facility, including pavement markings, pavement condition (based on City's PCI data or field observations), and classification. Alta will catalog level of completion of facilities according to the Alameda CTC sub classification scheme. (e.g. Class 3e – Bicycle Boulevard).

Pedestrian Facility Inventory

Alta will conduct a pedestrian facility inventory on a subset of Livermore streets to evaluate existing conditions and inform the Pedestrian Level of Service analysis (described later in Task 1.C.3). Priority corridors may be chosen based on the results of the Bicycle and Pedestrian Suitability Index demand analysis (described later in Task 1.C.3),

existing pedestrian activity, whether a route was identified in Suggested Routes to School maps, the presence of existing sidewalks or pedestrian connectors, and/or proximity to commercial areas.. Interior access will not be covered in areas not in the public right-of-way. The infrastructure assessment will use qualitative and quantitative metrics to evaluate up to five miles of pedestrian routes.

Trail Facility Inventory

Using maps and existing data provided by the City, and in-field observations, the Alta team will prepare a citywide physical inventory of conditions along the existing and previously proposed trail routes. The inventory will include: relevant physical conditions and opportunities and constraints for trail improvements. Alta will capture level of completion of trail facilities in an excel table and on a map.

Education, Encouragement, and Enforcement Programs Inventory

Alta will inventory and review existing bicycle, pedestrian, and trail education, encouragement, outreach and enforcement programs in Livermore. These will include programs initiated by the City, community groups, and agency partners such as Bike East Bay and the Alameda County SR2S program.

Task 1.C.2 Deliverables

- Content to be included in Working Paper #1, identified in Task 1.C.3 Deliverables.

Task 1.C.3 Needs Analysis

As part of the demographic, land use, and future demand analysis, the Alta team will review the data sources listed below to complete the following sections.

Additional Data Sources

- SWITRS collision data
- Traffic study data and analyses
- Available Safe Routes to School (SR2S) data
- Bicycle and Pedestrian inventory data
- Public health statistics
- Population and building density data
- Traffic study data and analyses
- American Community Survey data
- Roadway characteristics (classifications and, if available, number of travel lanes, travel lane widths, speed limits, and ADT)
- Intersection characteristics, including intersection controls

Demographics and Land Use

Alta will assemble a demographic and socioeconomic profile to support the Active Transportation Plan. The profile will identify the needs and characteristics of different types (ages, comfort levels, experience levels) of active transportation residents and visitors as well as different trip types. We will provide particular attention to access to some of the major employers in the area, including:

- Lawrence Livermore National Laboratory
- Sandia National Laboratory
- i-Gate Nest
- Local Wineries
- Valley Health System
- Comcast Cable
- FormFactor, Inc.

Alta will query the available Safe Routes to School studies that Alta and Alameda County Safe Routes to Schools team partners conducted for East Avenue Middle, Jackson Avenue Elementary, Marilyn Avenue Elementary, and Junction K-8 Schools to identify key issues and opportunities for walking and biking to Livermore schools.

Safety and Collision Analysis

The Statewide Integrated Traffic Records System (SWITRS) provides information on reported collisions. Using SWITRS data, Alta will conduct a collision analysis investigating:

- Collision locations

- Primary collision factor
- Violation category
- Movement before collision
- Time categories
- Demographics
- Absolute number and percentage of injuries and fatalities

We will work with City staff, the CAC and TAC, and local stakeholders to identify problematic intersections, difficult grades, and areas with high stress for walking and biking, such as high-volume roadways.

Alta will prepare graphics to illustrate the locations of collisions and high-volume roadways. Information derived from the collision analysis will be used to identify specific locations for further review and proposed improvements.

Demand Analysis

Alta will use our innovative GIS-based methodology known as the Bicycle & Pedestrian Suitability Index (B/PSI) to evaluate current and future biking and walking demand in Livermore.

This analysis will quantify factors that impact walking and bicycling activity, locate network gaps as potential projects, and identify key pedestrian/bicycling areas based on demand and supply variables. The analysis combines metrics representative of where people live, work, play, shop, access transit, and access schools into a composite sketch of city-wide walkability and bikeability. This technique is used in conjunction with the Level of Traffic Stress analysis (described later in this task) as well as the results of the pedestrian infrastructure assessment, and can be used to identify and prioritize projects. The result is an overall index of areas with the demand, highest walking/biking potential. Improvements in these areas are likely to have the greatest benefits.

Level of Service and Traffic Stress Analyses

Alta will conduct a Pedestrian Level of Service Analysis (PLOS) to assess the level of safety and comfort on the subset of streets selected for the pedestrian inventory. The PLOS will assess segments and intersections separately. The PLOS analysis will measure pedestrian safety on segments using four factors: posted speed limit, roadway width (number of travel lanes), pedestrian buffer (on-street parking or bicycle lanes), and the presence of sidewalks. Intersections along the selected streets with functional classifications of "collector" or "arterial" will be examined, as these typically present the greatest obstacle to pedestrians. Arterial and collector intersections and crossings will be assessed based on travel lanes, crosswalks, curb ramps, and crossing control.

Alta will assess the Level of Traffic Stress (LTS) on the existing bikeway facilities using a modified Level of Traffic Stress analysis methodology. This methodology is built on research that assigns a level of stress based on number of vehicle travel lanes, existing bicycle facilities, and intersection controls. This analysis identifies what percent of Livermore residents would be comfortable riding on a given route, and how proposed improvements will increase active transportation levels. Gaps in the network will be identified in terms of user comfort, identifying where a segment drops below the desired level of traffic stress (e.g. where a traffic calmed bike boulevard crosses a major roadway without protection or converts to a traditional bike lane), and implications for ridership. This approach will look at:

- Accessibility of regional destinations
- Potential new facility requirements (in excess of existing and planned facilities)
- Existing barriers to bicycle and ped access

The results of the LTS analysis will be used to demonstrate priorities in route choice and will allow the city to see how specific project improvements improve overall bicycle mobility in the city based on the localized survey data developed earlier in the process. This process looks at the supply of the bikeway network, compared to bicycling demand which is assessed in the B/PSI analysis in Task 1.C.2. These two processes provide a comprehensive view of bicycling supply and demand in Livermore.

Health and Active Transportation Snapshot

The relationship between health and active transportation is well-documented and an important factor for many communities and potential funding sources. Alta will document information on the connection between health and bicycling and walking, covering the areas of physical activity/obesity, air pollution/asthma, climate change, mental health/stress, and safety/crashes from sources such as the California EnviroScreen 2.0 database (a current ATP grant program evaluation criteria). Existing local sources will be scanned for information on physical activity/obesity and mental health.

Alta will prepare Working Paper #1: Draft Plan Existing Conditions and Needs Analysis based on Tasks 1.C.1- 1.C.3 and submit to the City. Alta will revise based on a single set of consolidated internally consistent comments.

Task 1.C.3 Deliverables

- Working Paper #1: Draft Plan Existing Conditions and Needs Analysis
- Working Paper #1: Maps
 - Existing and previously proposed bikeways and trail network
 - Existing and previously proposed key pedestrian facilities
 - Existing bicycle parking facilities and multi-modal connections
 - Existing and proposed land use and settlement patterns map
 - Bicycle and pedestrian collisions map
 - Active Transportation Demand Map
 - Bicycle and pedestrian facility suitability map
 - Level of Traffic Stress Map (based on GIS availability)
 - Network gap analysis map

Task 1.C.4 Develop Goals and Objectives

The Plan's goals and objectives will set the foundation for project development, prioritization and implementation. Based on the existing conditions and the needs analysis, input from the TAC, CAC and public outreach, and a best practice review, the Alta team will develop the draft goals and objectives for the Plan. Goals are broad statements of what the City and its residents hope to achieve that support the Plan's vision statement. Objectives are measurable outcomes based on the goals. Policies are specific actions that guide the City's programs, activities, and action to achieve the vision and goals. Goals and objectives for the Plan may address:

- Safety
- Connectivity and convenience
- Level of user stress
- Programs

Alta will prepare Working Paper #2: Draft Plan Goals and Objective for City review. The City will provide Alta a single set of consolidated internally consistent comments. Alta will incorporate the comments in Task 1.D.1 Administrative Draft Plan.

Task 1.C.4 Deliverable

- Working Paper #2: Draft Plan Goals and Objectives

Task 1.C.5 Identify Network and Recommendations

Bicycle, Pedestrian, and Trail Network Recommendations

This part of the Active Transportation Plan is focused on the network infrastructure – the pedestrian facilities, bike routes, lanes, shared use paths, and trails. It will feature easy to read maps and summary tables of the proposed projects that comprise the ultimate completed network. The pedestrian recommendations will be supported by elements from the Toolkit for Improving Walkability in Alameda County (2009).

The Alta team will work collaboratively to develop a comprehensive set of projects that include network and spot improvements. The recommendations will be based on selection criteria which will be informed by the vision, goals, and policies, community input, and anticipated demand. The selection criteria may include:

- Demonstrated Need (collisions, community identified)
- Roadway Type (arterial, collector, local)
- Connectivity (connection to key activity centers)
- Overcomes barriers

Task 1.C.6 Develop Implementation and Financial Plan

Project/Program Prioritization Criteria

Alta understands the importance of assisting the City with taking projects from the Plan to implementation. Alta will develop evaluation criteria for all potential policies, projects, and programs developed during the master planning process. The criteria will build on the Vision and Goals for the plan as well as Alta's experience developing active transportation plans for other communities. The evaluation criteria will roughly describe impacts and benefits and are likely to include:

- **Safety:** The project addresses safety concerns such as reported collisions.
- **Community Identified Improvement:** The project is at a community identified challenge area.
- **Connectivity:** The project improves or provides a connection to a key destination.
- **Transit Coordination:** The project connects to transit.
- **Feasibility:** The project can be implemented within a one-to-five year time frame. Projects that require outside agency approval or significant funding will receive lower scores.

Criteria above will be used specifically to evaluate the recommendations and may be weighted in order to emphasize the importance of some criteria over others. Alta will submit the prioritization criteria to City staff in a memorandum for review and approval.

Project/Program Prioritization Evaluation and Phasing Plan

Once Alta receives approval on the project/program prioritization criteria, we will evaluate all recommendations to prioritize policies, programs and projects for implementation. The results of the evaluation will also feed into a Phasing Plan, including:

- Funding availability and requirements
- Other programmed transportation improvements
- Eliminating an immediate safety hazard
- Ensuring that the system grows rationally rather than as disconnected pieces over time

The Phasing Plan will recommend a ranking (low, medium, high) for a multi-phased approach.

Cost Estimates, Funding Options and Responsibilities

The Alta team with Kimley-Horn will prepare planning-level cost estimates for recommended projects. Planning level costs for projects will be separated between land costs (if any), site preparation costs, design/engineering costs, construction costs and environmental mitigation costs (if any). We will use the latest unit costs provided by the City's Engineering Department in tandem with figures from comparable communities in California. Cost estimates for programs will be included as well, but typically as a range that captures the variability in level of effort of programs that promote bicycling and walking.

Alta will also identify potential matching programs and other federal, state and local funding sources and compile the relevant requirements and deadlines for such programs. The list of funding options will outline responsibilities and which agency should take the lead role in the funding application.

Monitoring and Maintenance Program

The purpose of the monitoring effort is to (a) ensure that pedestrian, bicycle, and trail facilities are adequately maintained and promoted, (b) integrate and coordinate various City department efforts, (c) maintain strong regional support, and (d) promote use and enjoyment of the network through commute, recreational, and educational events. Alta will recommend an organizational format for successful monitoring of the system, which could take the form of an annual Report Card that informs the public of work conducted on Plan implementation to date. Maintenance and other operating expenses (including added policing costs) will be estimated based on local experiences and in comparable regions. A recommended maintenance program will be developed for existing and proposed facilities.

Economic and Social Benefits of Plan Implementation

The Alta team will estimate the economic and social benefits for Livermore resulting from the Plan's implementation.

The recommended projects will include:

- Network improvements
- Spot improvements
- Future Studies (signal timing, over/under crossings, trails, projects that will require further study)
- Future Projects (suggested routes to school maps, streetscape corridor plans, etc)

We will also identify the recommended corridors and intersections for conceptual design plans for development in Task 1.C.6.

Program and Policy Recommendations

Becoming a truly bicycle- and pedestrian-friendly community requires a multi-faceted approach, including strategies beyond traditional engineering and infrastructure projects. By working directly with the public through education efforts and encouragement/marketing programs, the City has the potential to raise awareness and acceptance of bicycling and walking as normal, healthy, fun parts of everyday life.

Based on community and stakeholder interests, concerns, needs, and resources for programs and policies as well as best practices, we will develop a set of recommendations to improve bicycle Education, Encouragement, Enforcement, Evaluation, and public outreach efforts. Program recommendations may include:

- Education
 - Share the Path campaign
 - Safe Route to School efforts
 - Wayfinding signage
- Encouragement
 - Bike buddy programs
 - Employer focused campaign
 - Open Streets events
- Enforcement
 - Bike, pedestrian or trail ambassadors
 - Traffic safety diversion program
- Evaluation
 - Annual bicycle and pedestrian count program
 - Bicycle tourism
 - Downtown, transit, and winery wayfinding

Policy recommendations may include:

- Development Review policies
- Maintenance policies
- New bicycle technologies (such as electric-bikes) policies
- Bicycle parking standards and design policies

Healthy Community/ Equity Analysis

The network recommendations will be tied back to the initial Health and Active Transportation Snapshot from Task 1.C.3. Alta will conduct a health data-driven process used to consider the equity of the network recommendations to vulnerable populations in Livermore.

Alta will provide the recommended projects, policies and programs in Working Paper #3: Administrative Draft Recommended Projects, Programs and Policies.

We will meet with City staff and the TAC in one working session each to review and discuss the recommendations. Based on the outcomes of the working sessions and a single set of consolidated, internally-consistent comments from the City, we will revise and include in Task 1.D.1 Administrative Draft Plan.

Task 1.C.5 Deliverables

- Working Paper #3: Draft Recommended Projects, Programs and Policies
- Working Paper #3: Maps
 - Existing and recommended bicycle, pedestrian, and trail facilities

Priority Project Corridor Design Sheets

Based on the results of the prioritization effort and input from City staff and members of the TAC and CAC, the Alta team will develop Project Conceptual Design sheets for up to ten (10) priority infrastructure projects. Project Sheets will describe key characteristics of each proposed route, route segment or intersection, including:

- Geographic location
- Proposed facility type(s)
- Dominant land use
- Key safety issues
- Project cost opinions
- Jurisdictional responsibility
- Required actions

Alta will work with Kimley-Horn to identify the physical design options and constraints, addressing safety and adequacy of right-of-way, potential environmental impacts, and implementation issues. The process of developing evaluation criteria and measures of performance to evaluate feasibility and utility of improvements will be carried out in two steps. The initial screening will identify potential improvements and constraints. A subsequent, more detailed analysis will illustrate critical comparisons and facilitate the prioritization of improvements into three categories:

- Near-term: All near-term (up to 2 years), fully funded, programmed mobility improvement projects on local roads
- Mid-term: Mid-term (2-5 years) operational strategies including sidewalk gap closures, bike lanes, and complete streets
- Long-term: Programmed projects consistent with the goals of the Plan that are not fully funded

Prioritization will also consider:

- Detailed cost benefit analysis
- Areas of high incidents for mobility conflicts
- Areas of high usage for pedestrian and bicyclists
- Combination of projects that address the same issues

The ten corridor projects will be developed at a conceptual design level. These projects will be designed to approximately a 35% concept plan level, including an engineer's estimate of probable cost. Physical roadway improvements will be prepared in AutoCAD based exclusively on aerial photography or available AutoCAD base mapping provided by City staff, and will show curb, gutter, pavement features, and other details necessary to visually describe the improvement and location. The City will provide available right-of-way (ROW) information for inclusion in these Conceptual Design Plans. Extensive field measurement or topographic survey will not be conducted as part of this task.

The Conceptual Project Sheets will illustrate the approximate location, estimated public ROW, design features, roadway intersections, cross-sections, mid-block crossing locations, or roadway segments.

The Conceptual Design Plans are intended to assist the City in specifically identifying the location and approximate unit cost of final improvement features to be included in future grant funding applications. To aid in future grant funding application, additional detail will be added to these plans such as photographs of example installations or additional design details to permit for easier translation to future design documents.

In addition to the conceptual design, a further quantitative evaluation may be conducted for the high priority recommended projects to support Environmental Review. It is anticipated that City staff will provide or help provide the following data:

- Corridor and turning movement volume counts
- Speed surveys
- Travel forecast model plots

If traffic data is unavailable or outdated, Kimley-Horn will coordinate with City staff to collect supplemental data to assure that the project dataset is complete and current. Supplemental data may include additional traffic counts or speed surveys. A set fee of up to \$5,000 has been allocated to collect supplemental data.

Based on the data available and/or collected, the high priority corridors will be evaluated to determine if CEQA-level significance thresholds are exceeded with the implementation of the project. This evaluation will be based on an Existing and Existing + Project scenario. No future travel demand forecast modeling will be completed for this task. However, evaluation of long-term conditions will be conducted utilizing the long-range forecast model plots provided by City staff, as described above. It is anticipated that the results of this evaluation will include intersection and/or segment level of service findings. These results will be included in the Environmental Review task. No separate deliverable is included for the LOS evaluation.

Task 1.C.6 Deliverables

- Project/Program Prioritization Criteria Memorandum
- Working Paper #4: Draft Implementation and Financial Plan
 - Recommended priority projects map
- Project/Program Prioritization Criteria and Evaluation
- Cost Estimates, Funding Options and Responsibilities
- Bikeway Monitoring and Maintenance Program
- Priority Project Design Sheets (up to 10)

TASK 1.D DOCUMENT PREPARATION

Task 1.D.1 Administration Draft Plan

Alta will prepare an Administrative Draft Plan for staff review. The Plan will be composed of Working Papers #1-4, plus an introduction, executive summary, and appendices.

- Working Paper #1: Existing Conditions and Needs Analysis
- Working Paper #2: Goals and Objectives
- Working Paper #3: Network, Program and Policy Recommendations
- Working Paper #4: Implementation and Financial Plan

The Administrative Draft Plan will include all the required bicycle master plan core elements as identified in the Alameda County Bicycle Master Plan Guidelines (2015), apply recommendations from the Toolkit for Improving Walkability in Alameda County (2009), and include all required elements for an active transportation plan to ensure Caltrans Active Transportation Program compliance.

Task 1.D.1 Task Deliverable

- Administrative Draft Active Transportation Plan (PDF)

Task 1.D.2 Draft Plan

Alta will revise the Administrative Draft Plan based on two sets of consolidated, internally-consistent comments provided by the City and provide the Public Draft Active Transportation Plan to the City. We will post the Public Draft Plan on the project website.

Alta will present the Public Draft Plan at the Community Workshop #2 and at up to two events as described in Task 1.B.2.

Task 1.D.2 Task Deliverable

- Draft Active Transportation Plan (PDF)

Task 1.D.3 Final Plan

Alta will collect community comments submitted through the project website, at event tabling, at Community Workshop #2, from City Council, by the City (a single set of comments), and prepare a response to comments table for City review.

We will work with the City to reach consensus on changes to the Public Draft Plan and prepare a Final Plan based on a total of two sets of consolidated, internally-consistent comments provided by the City.

Task 1.D.3 Task Deliverables

- Final Draft Active Transportation Plan
- 20 Hard Copies of the Final Plan and Environmental Assessment
- 10 CDs with electronic files of the Final Plan and Environmental Assessment

- Electronic file of the documents in PDF format suitable for online posting
- Electronic file of the documents that can be updated by City staff (format to be determined with City staff at the beginning of the project).
- One hard copy of the NACTO Urban Bikeway Design Guide (2nd Edition) and one hard copy of the NACTO Urban Street Design Guide (1st Edition)

Task 2 Mapping System Development

TASK 2.A EDITABLE PRINTED MAP

Alta will work with the City to develop an updated bikeways and trails map using the Alameda CTC sub-classification scheme. The map will be based on the map exhibits developed for the Plan using data provided by the City. Alta will also produce the back-side of the map to include resources, tips, safety info, and/or other related data. The City will provide Alta with the source files used to create the existing map. The map will be available for large-format printing, easy to read, and aesthetically pleasing. The map will be delivered in an Adobe Creative Suite digital format and a PDF.

Alta will manage the printing process for the map. We will compile competitive bids for the City's review and cost approval before any printing. This scope of work assumes printing of up to 1000 copies.

Task 2.A Deliverables

- Updated bikeways, pedestrian, and trails map (PDF)
- Updated bikeways, pedestrian, and trails map (digital file)
- Up to 1,000 bike, pedestrian, and trails map copies

TASK 2.B DATA ASSESSMENT AND DIGITAL MAP FILES

As described in Task 1.C.1, Alta will develop a data request memo that includes spatial data needed for project mapping and analysis. We will review the existing spatial data provided by the city and develop a short memorandum with any questions or clarifications needed to move forward with mapping and analysis in subsequent tasks. We will identify any additional data or formats that would be desirable or necessary for project work, or to provide analysis at a specified level of detail.

The deliverables include a file geodatabase, any custom Symbol Sets developed for the project, layer files used to develop any products, project file(s) (MXD), and metadata for developed feature classes.

Task 2.B Deliverables

- Updated file geodatabase
- Updated digital map files

TASK 2.C ONLINE INTERACTIVE MAP

The Alta team will create an interactive online bikeways, pedestrian, and trails map for the project website and for the City's future use. The interactive map will be created using fusion table functionality for benchmarking bike plan goals and user-friendly interface. The map will allow users to query the map for existing bikeway and trail facilities, planned facilities, and facilities in development. In addition to being a user-friendly experience for residents, the map can be easily updated by City staff. The City will host the online interactive map.

Task 2.C Deliverables

- Online interactive map

Task 3 Environmental Review

Alta will work with LSA to prepare a robust program-level IS/MND that evaluates the environmental effects of the Plan. The IS/MND will include an analysis of specific types of project components identified in the Plan that would result in less-than-significant effects, would require mitigation measures, or may need additional CEQA review as detailed designs are developed.

TASK 3.A PROJECT INITIATION AND MEETINGS

Project initiation will include several tasks, including attending a preliminary meeting and visit to key sites covered by the Plan; preparation of a base map based on Plan maps; compiling and distributing relevant documents; and data gathering. The project description of the Plan to be used for CEQA analysis will also be prepared as part of the project initiation task. LSA will attend one task kick-off meeting and two conference calls.

Task 3.A Deliverables

- Kick-off meeting attendance
- Participation in two conference calls
- Final Plan project descriptions

TASK 3.B ENVIRONMENTAL EVALUATION

Upon approval of the draft project description prepared as part of Task 3.A.1, LSA will undertake the environmental analysis. Analysis will be provided for each of the topical areas listed in Appendix G of the CEQA Guidelines. Biological Resources and Transportation are expected to be the key topical areas of concern and our approach is summarized below.

Biological Resources

Portions of new bike or trail routes could be extended through undeveloped lands or could otherwise affect sensitive environmental resources, such as wetlands and creeks. Using already-prepared planning documents (such as the City's General Plan), LSA will evaluate the impacts of implementation of the Plan on biological resources and prepare program-level mitigation measures to reduce the significance of these impacts.

Transportation and Traffic

There may be concerns that the introduction of new facilities could remove motor vehicle capacity, resulting in congestion. In addition, there may be interest in better understanding how certain Plan elements may change areas of high safety concern (e.g., how new pedestrian crossings may affect vehicle flow). LSA will work with Alta and Kimley-Horn will evaluate transportation-related impacts as described in Task 1.C.6.

LSA will work closely with the project team to formulate feasible and effective mitigation measures. Such mitigation measures most likely will be developed in the form of policies that can be incorporated directly into the Plan, if so desired (offering the opportunity to streamline implementation and monitoring of both the Plan and identified mitigation measures).

Task 3.B Deliverables

- Environmental analysis of draft projects
- Draft mitigation measures

TASK 3.C PREPARE IS/MND

LSA will compile the documentation developed as part of Task 3.A and Task 3.B to prepare an IS/MND. The IS/MND will be used to: 1) provide program-level environmental clearance for the Plan; and 2) function as the platform document for conducting subsequent environmental review for individual Plan projects that have the potential to result in significant environmental impacts. LSA will prepare an electronic copy (PDF and Microsoft Word file) of an Administrative Draft IS/MND for review by the project team and the City. After receiving one set of consolidated and internally consistent comments, LSA will prepare an electronic and one paper copy of a Screencheck Draft IS/MND for final review.

LSA will prepare one electronic copy of the Public Review Draft IS/MND and submit for printing and distribution. LSA will submit the IS/MND to the State Clearinghouse. Alta will be responsible for coordinating with the City on distribution and noticing of the IS/MND. In addition, LSA will prepare the Notice of Completion (NOC) and Notice of Intent (NOI) to adopt the MND. After public review, LSA will work with the project team to respond to substantive comments received on the IS/MND. A response will likely be in the form of a short memorandum. LSA will also draft a Mitigation Monitoring and Reporting Program (MMRP) and a Notice of Determination (NOD) for the City's use.

Task 3.C Deliverables

- Administrative Draft IS/MND

- Screencheck Draft IS/MND
- Public Draft IS/MND
- Notice of Completion
- Notice of Intent
- IS/MND Comment Response Memorandum
- Mitigation Monitoring and Reporting Program
- Notice of Determination