



Memorandum

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DATE: January 27, 2014

SUBJECT: Scope of Work for Development of a Countywide Multimodal Arterial Plan

RECOMMENDATION: Approve the scope of work and authorize the release of a Request for Proposals (RFP) for development of a Countywide Multimodal Arterial Plan and authorize the Executive Director, or a designee of the Executive Director, to negotiate and execute one or more professional services agreements with consultants or consultant teams selected as a result of the RFP process in accordance with procurement procedures.

Summary

The proposed Countywide Multimodal Arterial Plan will build on the previous corridor planning and Countywide Transportation Plan efforts of Alameda CTC to better understand the existing and future role and function of the countywide arterial system, provide a framework for the integrated management of major arterial corridors to support all modes, improve overall mobility, connectivity, and safety on the countywide arterial system while better serving the adjacent land uses, and identify a priority of short and long term improvements. The plan development will be closely coordinated with the local jurisdictions and Caltrans as well as transit operators. Additionally, it will coordinate with the on-going development of Goods Movement Plan and Multimodal Arterial Corridor Plan and the upcoming Community Based Transportation Plans Update.

This memo summarizes the scope of work, key outcomes and objectives, and a schedule for the proposed Countywide Multimodal Arterial Plan. The scope was reviewed by ACTAC in January, and comments received were incorporated. Upon approval of the Commission in February, a request for proposals will be released at the end of February or beginning of March 2014.

Background

Arterial roadways are a critical component of the regional and local transportation system that moves people and goods within the county and the region. These roadways provide regional and local mobility with multiple transportation modes, access to surrounding land uses, and connectivity between employment and activity centers that is essential for Alameda County's economy and quality of life. However, in Alameda County, there is neither a complete inventory of arterial infrastructure, which is the first step in arterial

management, nor is there a comprehensive strategy for managing these important roadways that take into account all modes and users of the transportation system. Previous plans and studies, such as the San Pablo Corridor Plan, the Central County Freeway Study, the Triangle Study and others, focused on satisfying Congestion Management Program (CMP) requirements or addressing issues specific to individual areas or corridors. Regional arterial management efforts have also been limited to improving freeway performance or to making localized traffic control improvements in a few areas through the Metropolitan Transportation Commission's (MTC) Freeway Performance Initiative (FPI) and the Program for Arterial System Synchronization (PASS). Alameda CTC would like to build upon this previous work to develop a Countywide Multimodal Arterial Plan to comprehensively study the major arterials in the county, to provide a framework for the integrated management of major arterial corridors to support all modes, improve overall mobility, connectivity, and safety on the countywide arterial system, better connect land use and transportation, and identify of short and long term priority improvements.

The Alameda County transportation system consists of an extensive multimodal transportation network that facilitates the movement of people and goods within the county and the region. The county roadways consist of 3,600 centerline miles of roadways, and the majority of them are arterials and local roads. Most of the arterials also support or connect to alternative modes such as transit hubs, rail stations, transit routes, bikeways and pedestrian paths. To support the effective functioning of the transportation system, particularly arterials, many Travel Demand Management (TDM) and parking management strategies are implemented by local jurisdictions and regional agencies to maximize the existing capacity by shifting trips to alternative modes. Arterials also provide access to surrounding land uses and connectivity between employment and activity centers. Therefore, effective countywide arterial management is critical to the mobility of people and goods, connectivity across the county and ultimately for the economy, local communities, jobs and quality of life.

It is however challenging to address all competing needs on the arterial corridors particularly with continuously diminishing resources. Alameda CTC uses a corridor/areawide transportation planning process to identify and establish priorities for transportation improvements. This process is based on cooperative planning and coordinated action by local governments, Caltrans, transit agencies, and MTC. To date, Corridor Plans have been developed for most of the freeways in the county and some major arterials such as San Pablo Avenue Corridor, Central County Freeway Study (SR 238), SR 84 Historic Parkway Local Alternatives Transportation Improvement Program, and the Triangle Study. Many improvements identified in these plans are either already implemented or identified for implementation.

As stated previously, until now, Corridor Plans have been developed based upon need or to address location specific transportation issues. However, new legislative requirements related to climate change and complete street concepts, and new funding requirements that tie transportation funding to developments that foster the integration of transportation and land

use necessitate the need for area-wide multimodal planning and better knowledge of how the countywide arterial system functions. Both the 2012 Countywide Transportation Plan and the 2013 Congestion Management Program identified the need for the multimodal planning, and identified as next steps the development of a comprehensive TDM Strategy, a Countywide Goods Movement Plan, a Countywide Transit Plan, and a Countywide Multimodal Arterial Plan. The Countywide Comprehensive TDM Strategy was already developed and adopted by Alameda CTC in May 2013. The Countywide Goods Movement and Transit Plans development are underway. This Plan, the Countywide Multimodal Arterial Plan, will coordinate with the above planning efforts and focus on studying how the arterials in the county are functioning and how they can be better integrated modally. This Plan will provide a basis for making informed short and long term investment decisions, achieving a coordinated countywide multimodal arterial corridor network, and establishing supportive policies and strategies to improve person and goods mobility, access, connectivity and economic growth while supporting livable communities.

Purpose of the Countywide Multimodal Arterial Plan:

The purpose of the Countywide Multimodal Arterial Plan is to:

- Understand the existing role and function of countywide major arterial corridors and to define their future role and function by mode;
- Identify a countywide arterial network that supports all modes and connects to surrounding land uses and the rest of the countywide transportation system and regional activity centers;
- Provide a framework for the integrated management of a countywide arterial network;
- Improve overall mobility, access, connectivity, safety and efficiency of the multimodal network for all users, including goods movement, and considering the application of new technologies; and
- Provide a basis for prioritization of short and long term improvements to attract funding and coordinating policies and strategies between all levels of government.

The Plan will be developed in close coordination with local jurisdictions and Caltrans, as they are the owners and operators of the principal and major arterials in the county, and the local jurisdictions that have the authority over land use decisions and development. The Plan is anticipated to provide common goals and implementation mechanisms for jurisdictions, transit agencies, Caltrans and Alameda CTC in their efforts to improve the performance of key arterial corridors, including support and facilitation of the following:

- Implementation of the required Priority Development Areas Implementation Growth Strategy (PDA IGS) (including Priority Conservation Areas (PCAs)) and complete street policies;
- Effective and coordinated traffic management and Intelligent Transportation System (ITS) technologies on the arterial network, particularly those that traverse multiple jurisdictions and cross county lines;

- Implementation of supportive TDM/Transportation System Management (TSM) and parking management strategies, particularly between jurisdictions;
- Improved and seamless connectivity across the county for all modes;
- Improved coordination and connectivity between land use and the multimodal transportation system, including goods movement and delivery needs within and between jurisdictions and county lines; and
- Addressing modal priorities and conflicts through identification of roadway typologies with the goal of improving multimodal system efficiency across the county, including improved transit travel time.

Scope of Work and Deliverables

The following tasks summarize the general scope of services needed for development of a Countywide Multimodal Arterial Plan in Alameda County.

Task 1: Inventory existing plans, studies and policies, and identify a baseline integrated Countywide Multimodal Arterial Corridor Network (Arterial Network)

This task will inventory the existing arterials and corridors of countywide or regional significance in existing transportation plans, studies and policies. The inventory should include review of state routes, truck routes identified by Caltrans and local jurisdictions, the Metropolitan Transportation System (MTS) network, the Congestion Management Program (CMP) network, local transportation/circulation plan major corridors, transit routes, primary connections to transit hubs or rail stations, major bike routes, routes serving Transit Oriented Developments (TODs) and PDAs, and lifeline and evacuation routes. Additionally, an inventory of the existing arterial Intelligent Transportation System (ITS) across the county and all planned improvements related to the functioning of the Arterial Network, including any operational strategies will be documented.

In addition, this task includes defining a baseline countywide integrated arterial network (Arterial Network) as a result of the inventory analysis and coordination with the local jurisdictions, including the rationale and methodology for defining the baseline network. This baseline network should consist of major, core arterials along with identification of supporting connecting/parallel routes to make any corridor on the network a complete multimodal corridor. It is anticipated that any planned strategic improvements to this Arterial Network will contribute to improved performance of the larger countywide transportation system. The Arterial Network should also include key rural routes that support the agricultural economy (e.g., farm to market flow and agricultural tourism) and efforts related to implementing Priority Conservation Areas (PCA), and connections to adjacent counties.

This task also includes documenting the role, use, utility and benefit of the major arterials in Alameda County in a white paper and fact sheet.

Deliverable: Technical memoranda summarizing arterial, land use and other studies that have included major arterials in the county and a comprehensive list of available data

sources for collecting information on arterials. This technical memorandum must provide the rationale and methodology for defining a baseline arterial network, with supporting maps and documentation. White paper and fact sheet documenting the role, use, utility and benefit of the arterials in Alameda County, including graphical representations of data.

Task 2: Develop Data Collection Plan and Databases

This task will develop and implement a data collection plan focused on supporting the data collection needs for all tasks in the development of the Arterial Plan. Existing data from all sources and partner agencies will be used as much as possible in order to make the most efficient use of resources. Three types of data will be collected: 1) travel demand and 2) infrastructure data, and 3) traffic data that support performance assessment. The travel demand related data could include, but not limited to demography, land uses, multimodal traffic and goods flow, origin and destination travel, TSM, TDM and parking strategies. Similarly the example multimodal and goods movement transportation infrastructure data are roadway capacity (number of lanes), freeway ramp connection type (e.g., metered), intersection control (e.g., stop sign, signalized), general ITS infrastructure including traffic management strategies deployed and intersection and arterial crossing infrastructure supporting bicycle and pedestrian uses, type of transit route and transit support facilities (e.g., bus shelter, parking and Park-N-Ride lots), bikeways, and sidewalks. Multimodal traffic data related to the Arterial Network could include, but is not limited to, speed, traffic volumes, mode share, transit ridership, transit travel time, bicycle and pedestrian counts, truck counts, and number of collisions. Once the data needs and sources have been identified, the data will need to be collected and put into database format. These data sources must be coordinated with other modal plans currently under development by Alameda CTC.

Deliverables: Technical Memoranda documenting the approach and rationale for data collection, including identification of certain data sources for future updates; a data collection plan; implementation of the plan and resulting databases.

Task 3: Identify Existing and Future Conditions and Perform Needs Assessment for the Arterial Network

This task will build upon the land use and arterials inventory developed in Task 1 and the data collection in Task 2 and will document existing and future conditions including support programs and strategies, develop growth projections and identify multi-modal travel demand for the Arterial Network. The existing and future conditions will be presented in terms of use and related infrastructure for all modes, including traffic management and ITS infrastructure. Factors related to travel demand such as demographic trends, surrounding land uses, multimodal traffic and goods flow, origin and destination travel, and supportive TDM and parking strategies, will also be documented, and will be coordinated with the other modal plans that Alameda CTC is concurrently undertaking.

A needs assessment will be performed under this task, including identification of needs, gaps and deficiencies regarding multimodal infrastructure capacity and operations, including ITS, and the ability to support future travel demand on the network while serving the adjacent land uses and connecting to activity/employment centers. As part of the needs assessment, additional future arterial segments will be identified, as applicable, within the county, as well as major bottlenecks for all modes, existing and potential modal conflicts, and goods movement and coordination issues across the county on the Arterial Network. This task will also identify, based on the data collected, the role, functions and modal preferences of the Arterial Network in various parts of the county such as roadways or parts of the roadways that are critical to providing freeway connectivity or activity center connectivity; serving as freeway reliever routes, primary transit routes or trunk lines, goods delivery routes, or part of countywide bicycle or pedestrian networks; connecting to focused land use developments such as PDAs/TODs or adjacent counties; and supporting implementation of PCAs and the agricultural economy (i.e., farm to market and agricultural tourism).

Deliverables: Technical Memoranda documenting existing and future conditions, growth projections, and outcomes of the needs assessment.

Task 4: Develop Vision, Goals and Objectives for the Plan

This task will develop the vision, goals and objectives for the Countywide Multimodal Arterial Plan that tier off of the adopted Alameda County Countywide Transportation Plan vision and goals. These will be developed in coordination with local jurisdictions, transit agencies, Caltrans and stakeholders to ultimately serve the purpose of creating a comprehensive, integrated Countywide Multimodal Arterial Plan. The vision, goals and objectives will reflect current transportation planning trends and legislative context in terms of multimodal needs, greenhouse gas reduction, and complete street approaches. It will enable the Plan to address future travel demand of all modes of transportation using the arterials; effective land use and transportation integration; coordinated TDM/TSM strategies, parking and traffic management; and efficient and safe local goods movement and delivery; improved travel safety, economic development, and regional connectivity.

Deliverable: Technical memorandum documenting the vision, goals and objectives for the Countywide Multimodal Arterial Plan and the process of their development.

Task 5: Develop Multimodal Performance Measures

This task will develop a set of multimodal performance measures that will be used to evaluate the Arterial Network consistent with and to meet the established goals and objectives and assess the network's existing and future performance. While most of the performance measures are anticipated to be quantifiable, qualitative measures can also be included if they better represent the performance assessment of a particular function. The performance measures should also have the ability to identify or measure the application of the transportation planning and corridor operations concepts such as "Complete Streets, Fix it

First and ITS methodologies" and transportation demand and system management. These performance measures must be developed in coordination with other modal plans currently being developed by Alameda CTC.

Deliverables: Technical memorandum documenting the list of multimodal performance measures and development methodology, and data sources for use in determining system performance and to evaluate projects.

Task 6: Develop Roadway Typology,

Based on the work done in previous tasks, this task will develop a roadway typology in terms of how the Arterial Network supports transit, bicycle and pedestrian, and automobile travel while serving the adjacent land uses, providing a framework to facilitate implementation of the Complete Streets requirements. Developing the typology will maintain a local context throughout the county and also consider the need for appropriate access needs for various land uses that support the local economy. Using a roadway typology structure to frame the Arterial Network will provide a basis for determining coordinated modal priorities, which are compatible to the adjacent land uses, between jurisdictions and across the county and will help identify effective transportation improvements for each mode to ultimately develop a seamless multimodal network.

Deliverable: Technical memorandum and related maps documenting the process for developing the roadway typology and outcome.

Task 7: Identify Future Short and Long-Term Improvements by Mode and other Supportive Operational Programs and Strategies

This task includes several activities or sub-tasks that will ultimately lead to identification of multimodal improvements in terms of projects and programs prioritization and strategies development. Using the performance measures and data collected, and considering the roadway typology, the Arterial Network will be updated and evaluated to identify short and long-term improvements by mode to address existing needs and accommodate future growth as identified in previous tasks that will meet the purpose, goals and objectives of the Plan. Modes and operational programs that should be considered in the evaluation and in making recommendations for improvements include, but are not limited to:

- Roadways
- Transit
- Bicycle and Pedestrian
- TDM/TSM and Parking
- Goods Movement
- Traffic Management/ITS (see Task 8)
- Green Transportation Initiative Programs

For the evaluation of the Arterial Network, Complete Streets and Fix-it-First concepts will be an important underlying principle for identifying future modal improvement measures and management strategies. For identifying improvements, all recommendations will need to be coordinated with other on-going modal plans work and existing and future planned efforts at the local, county, regional and state (e.g., Caltrans' Corridor System Management Plans and MTC's Climate Initiatives) levels. In addition, any regional process that is required for implementation of the improvements or strategies, particularly to support implementing the complete street requirements, will be identified and coordinated with the respective agencies to support streamlined processes.

Deliverables: Technical Memoranda and related maps documenting the performance evaluation process, results and assumptions; short and long term improvements and management strategies by mode and other supportive operational programs.

Task 7.1: Revisit and Re-evaluate the Arterial Network

Considering the additional data collected, and needs and improvements identified after the initial development of the Arterial Network in Task 1, this sub task will revisit and re-evaluate the Arterial Network for this Plan in terms of its reasonableness to meet the Plan goals and objectives, and update the network, as applicable.

Deliverable: Technical memorandum documenting the process for re-evaluating the Arterial Network and outcome and updating the Arterial Network, including maps.

Task 8: Develop Traffic Management Coordination Strategies, Policies and Best Practices

This task will identify strategies, policies and best practices for better inter-agency coordination and effective governance for an efficient management of the Arterial Network across the county and between the local jurisdictions, and between the adjacent counties at the county lines. The intent is to facilitate implementation of the Traffic Management/ITS improvements and management strategies developed in Task 7 addressing short and long term ITS needs including recommendation for best practices and newer technologies supporting Complete Streets. The task will identify areas that need on-going coordination and document or address consistency or compatibility issues in traffic management technologies used between adjacent jurisdictions. Communication between the traffic management systems along a contiguous arterial network and the connecting freeway and transit networks is essential for ensuring better mobility, travel reliability and modal connectivity along the Arterial Network. Considering the numerous owners and/or operators involved in the functioning of the traffic management system on the Arterial Network in Alameda County, working with the respective agencies, local jurisdictions, Caltrans and transit operators to identify management strategies, policies and best practices will be critical to the success of future improvements on the Arterial Network.

Deliverables: Technical memorandum documenting Traffic Management Coordination Strategies, Policies and Best Practices.

Task 9: Develop an Implementation and Financial Plan

The implementation and financial plan will document the phasing and timing of identified improvements by transportation mode and supportive operational program and strategies from Task 7 to prioritize improvements to attract funding. It will identify responsible lead/participating agencies and recommendations for monitoring progress and improvements. This task will also identify the Plan elements that will need periodic updates and monitoring, including data needs, timelines for updates and responsible agencies. The financial plan will consist of a capital, operations and maintenance plan that includes cost estimates as well as potential funding sources. Capital costs for multimodal, freight, and parking supportive infrastructure improvements will also be included.

Deliverables: Technical memoranda documenting the implementation and financial plan, Development of an initial 5-year list of priority projects and programs, including costs and schedules.

Task 10: Prepare Administrative, Draft and Final Plan

This task assumes that an administrative, draft and final document for the Plan will be produced. Responses to two rounds of comments per document should be assumed. The final document will include a stand-alone Executive Summary and will include a compilation of the technical memoranda in the format of a Countywide Multimodal Arterial Corridor Plans.

Deliverables: Administrative, Draft and Final Countywide Multimodal Arterial Corridor Mobility Plan.

Task 11: Develop and Implement Technical, Public and Stakeholder Outreach Strategy

Develop and implement a public and stakeholder outreach strategy that provides for effective participation and is as inclusive as possible. Considering that the arterials traverse the local jurisdictions and that they are owned and operated by the local jurisdictions and Caltrans, coordination with the Alameda County cities, the county along with Caltrans and MTC is anticipated. Similar to the other modal plans, the Technical Team for this Plan development is expected to be provided by the existing Alameda County Technical Advisory Committee (ACTAC). Public outreach could include workshops in coordination with other modal plans and possibly up to four Transportation Forums.

Deliverables: Technical memorandum detailing the technical, public and stakeholder participation approach and timeline.

Task 12: Project Management and Coordination with other Countywide Planning Efforts

The Alameda CTC is embarking on the development of four countywide planning efforts: Goods Movement, Transit, integration and update of Community Based Transportation Plans,

and Multimodal Arterial Plan. In addition to overall project management, the development of the Countywide Multimodal Arterial Plan include this task for coordination with the development of the other three plans, including meetings and stakeholder input, and community outreach, if needed. Close coordination with the transit and goods movement plan is particularly important and will occur throughout the Countywide Multimodal Arterial Plan development process.

Schedule

The consultant selected to perform this work is anticipated to commence in spring 2014 and complete the final plan by the end of 2015.

Fiscal Impact: The fiscal impact for approving this item is \$800,000, which was included in the budget adopted for FY 13-14.

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