



City of Palo Alto

City Council Staff Report

(ID # 1320)

Report Type: Action Items Meeting Date: 2/14/2011

Summary Title: California Avenue Neg Dec and CIP

Title: Approval of Negative Declaration and Establishment of a Capital Improvements Program (CIP) to Fund the California Avenue Project Improvements in the Net Amount of \$550,000 Out of the Infrastructure Reserve Fund

From: City Manager

Lead Department: Planning and Community Environment

Recommendation

Staff and the Planning and Transportation Commission recommend that the City Council:

1. Approve the proposed Negative Declaration for the Project (Attachment A), and
2. Establish a Capital Improvements Program (CIP) to fund the project improvements in the amount of \$1.725M out of the Infrastructure Reserve Fund of which \$1.175M will be grant-reimbursed, with a net impact of \$550,000 to the City.

Executive Summary

The proposed California Avenue – Transit Hub Corridor Improvements Project provides for streetscape improvements, including a reduction from four lanes to two lanes of travel, along California Avenue between El Camino Real and the California Avenue Caltrain Station. The intent of the project is to provide for place-making design, traffic calming and safety enhancements, and retail vitality and other economic benefits. A traffic study has been prepared and demonstrates that there will be negligible impacts due to the lane reduction, while providing for increased street parking. Enhanced pedestrian and bicycle facilities and safety measures are also included in the project.

The City Council is being asked to consider the adequacy of the Negative Declaration prepared for the project and to approve a Capital Improvement Program to fund the project. A City Council decision regarding the lane reduction is also required at this time because the grant funding is predicated on the two lane concept. The Planning and Transportation Commission unanimously supported the project at its meeting on January 12, 2011. Detailed design of project components (benches, signage, artwork, bike racks, pavement treatment, etc.) will be addressed in an extensive community review throughout 2011.

Project Description and Background

In October 2010, the City submitted an application to the Valley Transportation Authority (VTA) for Community Design for Transportation (CDT) Program funding for the California Avenue Transit Hub Project. The City Council authorized the filing of the grant request on December 6, 2010. The VTA approved the grant application for project funding in the amount of \$1,175,200 on December 9, 2010.

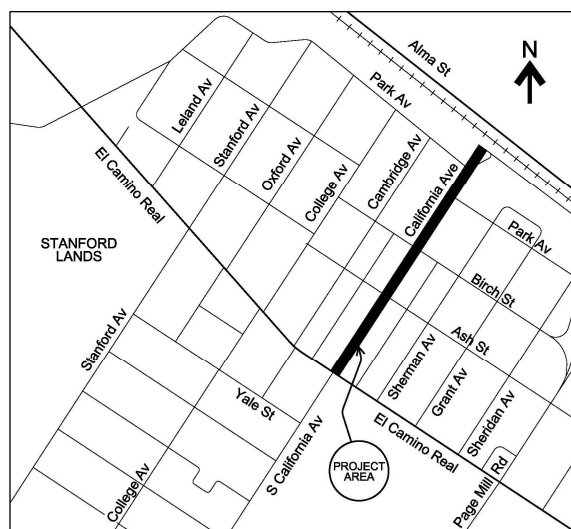
Purpose

The proposed project provides for streetscape improvements along California Avenue between

El Camino Real and the California Avenue Caltrain Station to provide for place-making design, traffic calming and safety enhancements, and retail vitality and other economic benefits. In keeping with the vision of the Comprehensive Plan, the purpose of the California Avenue Streetscape Project is to develop a “complete” roadway that best utilizes the available right-of-way of the street to:

- Provide safe space for pedestrians and bicyclists along and crossing the street;
- Maintain efficient vehicle movements while slowing cars and trucks to enhance safety;
- Enhance the overall appearance of the street and adjacent non-vehicular spaces with trees and landscaping, public art, tables and chairs for outside dining, benches, kiosks, signage, and bicycle racks;
- Accommodate parking needs; and
- Facilitate the use of the plaza near the train station for amenities such as a fountain, landscaping, pedestrian access, seating areas, and bicycle racks.

California Avenue has historically been a four-lane street. It originally provided access to Alma Street but is now disconnected from that street by the Caltrain tracks and is not likely to ever be reconnected. As a result, California Avenue accommodates a very low level of vehicular traffic (see analysis below). The plan proposes a lane reduction to improve the pedestrian/bicyclist experience along the street and the connection between the existing land uses and the enhanced streetscape elements. Two-lane streets frequently serve as central business district streets and provide more effective use of the public right-of-way while enhancing the pedestrian and business environment. The lane reduction also allows existing on-street parking to be brought to current parking design standards while expanding the availability of parking on the street.



Discussion

The proposed streetscape project will enhance the pedestrian, bicycle and vehicular environment along California Avenue, including the plaza area adjacent to the Caltrain station. This kind of approach, including lane reduction, has been successful in many other downtown areas, such as Menlo Park, Mountain View, and Los Gatos locally and many others regionally, statewide and nationally. The traffic impact of the changes, as summarized below, is negligible as California Avenue generates only a fraction of the traffic volume seen on downtown streets in those cities. The approved grant would allow the City to leverage its funds to repave and restripe the street to provide much more extensive benefits and an economy of scale for the streetscape.

The City Council is being asked to consider the adequacy of the Negative Declaration prepared for the project and to establish a Capital Improvement Program to fund the project. A City Council decision regarding the lane reduction is also required at this time because the grant funding is predicated on the two lane concept. Detailed design of project components (benches, signage, artwork, bike racks, pavement treatment, etc.) will be addressed in an extensive community review throughout 2011.

Key issues raised relative to the project include traffic, parking, and economic/business impacts.

Traffic

In order to evaluate whether the 4-lane to 2-lane reduction would have any significant impacts on existing traffic conditions, a Traffic Impact Analysis (TIA) was prepared (Attachment B) as part of the Initial Study for the project and focused on three elements:

- Intersection Level of Service (LOS)
- Roadway segment LOS by block segment, and
- Independent roadway operations analysis of the City-prepared plan line concept for California Avenue.

These three components of the traffic report are discussed in depth in the attached staff report prepared for the PTC meeting dated January 12, 2011 (Attachment C). The Initial Study concluded that there are no significant impacts associated with the project, including the reduction of four lanes of traffic to two lanes. The PTC report also notes that the traffic volumes on California Avenue are considerably less than other "downtown" two-lane streets, such as University Avenue, Santa Cruz Ave. (Menlo Park), Castro Street (Mountain View), and Santa Cruz Avenue (Los Gatos).

The intersection LOS findings show that the 4-lane to 2-lane redesign on California Avenue between El Camino Real and the Park Blvd. Plaza does not result in any significant Level of Service impacts to the study intersections. No anticipated shifting of traffic from California Avenue to adjacent parallel streets such as Cambridge Avenue or Sherman Avenue is expected if the street is restriped to two lanes.

The roadway segment LOS findings show that the 4-lane to 2-lane reduction on California Avenue between El Camino Real and the Park Blvd. Plaza would result in a Less Than Significant impact to the street: each of the roadway segments would operate at LOS B or better. This is expected because even under project conditions (2-lanes), the directional capacity of the roadway is still twice as great as the vehicle demand of the street.

The operations analysis recommended that the project:

- 1) Maintain 2 lanes westbound on California Avenue approaching El Camino Real;
- 2) Reduce the parking angle from 60-degree to 45-degree stalls at select block segments;
- 3) Eliminate lane-merge locations along the corridor; and
- 4) Provide ADA-compliant handicap ramps at Park Blvd.

It is not anticipated that future traffic conditions (cumulative impacts) along the street would warrant four travel lanes. Although the existing Comprehensive Plan encourages intensification of mixed use in the California Avenue area, it is highly unlikely that enough development would occur to result in significant traffic impacts along California Avenue under a two-lane scenario because there is so much capacity in the system for additional trips. The possible land use intensification currently being considered as part of the California Avenue Concept Plan is unlikely to generate traffic volumes that would result in degradation to LOS E or worse, which is what City policies mandate before mitigation is required. Traffic volumes at specific intersections would need to increase from 2x to 10x existing levels to begin to approach these levels.

Parking

The proposed project is intended to facilitate increased bicycling and walking by providing safer facilities (crosswalks, shorter crossings, wider travel lanes, signage, etc.), a more pleasant walking and bicycling environment, and increased bicycle parking. However, the project would also increase the number of parking spaces by a total of 17 spaces for the length of the street, primarily by altering the angle of the parking. This preliminary figure could be adjusted slightly during the more detailed design phase, but in any event helps to address a current significant shortage of parking in the business district. In addition, approximately 75-100 new bicycle parking racks are expected to be added, many of which may provide incentive for visitors from the businesses in the Stanford Research Park and other nearby residents and employees to bicycle in lieu of driving cars and parking, saving the need for those spaces. Some of the Research Park businesses (AOL, Facebook, etc.) have already established bike share programs for employees for such purposes.

To address concerns of area businesses and residents, staff is also embarking on a significant parking study of both the Downtown and California Avenue business district areas. The parking study, to be developed over the next 6-12 months, will evaluate shortages in the California Avenue area, techniques to better utilize existing parking (technology, signage, restriping, etc.), and residential permit parking options. In addition, the California Avenue/Fry's Area Concept Plan under review will identify potential for new parking structures in the area.

Economic/Business Impacts

The California Avenue – Transit Hub Corridor Improvements Project is expected to generate economic benefits to the City and area businesses. The streetscape improvements are only a small part of the overall economic picture, however, which will also be affected by the land use and transportation effects of the California Avenue/Fry's Area Concept Plan and other current studies. Economic benefits may accrue due to:

- The provision of increased vehicle (17) and bicycle (75-100) parking spaces to supplement existing parking. If even 10% of the bicycle spaces displace vehicle spaces, the result will be a net increase equivalent of about 25 new parking spaces. Construction of a new parking space today costs up to \$50,000 per space, so the project should represent a significant cost savings to the City while providing more vehicle and bike parking for businesses.
- The enhanced pedestrian and overall aesthetic environment of California Avenue. Upgraded benches and tables, trash receptacles, paving treatments, plantings, artwork and other features should create an improved sense of place and quality for employees, residents, and visitors. The City's Economic Development Manager has contacted economic managers and businesses from other cities (Mountain View, Menlo Park, Los Gatos, and Los Altos) and found that, in those cities, initial concerns by merchants about reducing travel lanes and/or other changes on those downtown streets have turned to strong business support as traffic has slowed and pedestrian activity has increased over the years following the streetscape changes (Attachment F).
- Increased economic activity and sales associated with lane reductions and streetscape improvements, of benefit to both the City and merchants. Below are links to three brief articles and a survey about the economic benefits due to such enhancements on Valencia Street in San Francisco, Mill Avenue in Tempe, AZ, and select streets in Long Beach, CA. The Valencia Street article and study are particularly illustrative, in that they including surveys of merchants before and after the project, which included lane reductions and streetscape improvements. The merchants' opinions were highly positive following implementation. The articles are also enclosed as Attachment E.

<http://ealscoalition.org/2009/07/25/traffic-calming-has-positive-economic-effects-on-small-businesses-and-property-values/>

http://www.emilydrennen.org/TrafficCalming_full.pdf

<http://www.planning.org/greatplaces/streets/2008/millavenue.htm>.

<http://www.planetizen.com/node/44645>

Staff understands that there may justifiably be concerns by businesses about disruption of their operations and access during the approximately one year of construction on the street. Staff suggests that, during the design period, detailed construction phasing be developed with

extensive merchant input to help minimize disruptions from construction. Also, the need for additional loading zones will be evaluated during the design phase.

Capital Improvements Program Project

A new Capital Improvements Program (CIP) project account to fund the California Avenue – Transit Hub Corridor Improvement Project needs to be established to front the costs of the project for eventual reimbursement by the grant during construction and to provide the City's match funding of \$550,000. To align the completion of the design phase with the release of the grant for construction of the project, this new CIP project is being pursued outside of the normal CIP review process to enable the design phase to begin immediately. A separate but concurrent roadway resurfacing project on California Avenue funded in the current CIP will be implemented during the construction of the California Avenue – Transit Hub Corridor Improvements project. The CIP project will also be formally included in the City's mid-year budget amendments.

Detailed Design

Subsequent to City Council action on the Negative Declaration for the project and the approval of the CIP to provide funding for the project, staff would engage the public in a series of community meetings over the remainder of 2011 to develop the final design concept for the streetscape project. The design plan would be reviewed by the ARB and PTC before final action by the City Council in early 2012.

Planning and Transportation Commission Review and Recommendation

On January 12, the Planning & Transportation Commission discussed the findings of the Draft Negative Declaration and the CIP allocation of \$550,000 of City funds for the project. The Commission supported staff's recommendation and voted unanimously (7-0) to recommend approval of the proposed Negative Declaration for the California Avenue streetscape project and to recommend a Capital Improvement Program to fund the project improvements. Nine public speakers provided testimony on the project. Their comments are summarized below, and the minutes from the meeting are also attached (Attachment D).

- Five (5) College Terrace, Evergreen Park, and Palo Alto Central residents supported the project due to the aesthetic and safety improvements, and to help revitalize the area.
- The President of the Palo Alto Central Homeowner's Association opposed the two lane configuration, but supported project elements such as the new signage and street improvements.
- A business owner on California Avenue opposed the project because the two lane configuration will create more congestion in the area during lunch and would result in parking impacts; and felt the project is not a priority for use of public funds.
- The Chair of the Palo Alto Bicycle Advisory Committee and a resident who bicycles to California Avenue supported the project because it adds parking and pedestrian safety improvements and the lane reductions would result in a safer environment for bicyclists.

Approximately a dozen e-mails in support of the project were directed to the PTC in advance of the meeting.

The Commission discussed the possible intensification of uses on the street from future development and the ability of two lanes to accommodate the increased traffic. Staff indicated that considerable traffic capacity is available with the two lane configuration. The Commission also had several questions regarding elements of the project that address the functionality of the street, e.g., loading zones and raised mid-block crosswalks. Staff explained the general concepts for the design of the streetscape, and noted that those components would be further discussed with the public during a series of community meetings over the next year and a final design would be reviewed by the ARB and PTC before Council action early next year. The Commission also had questions regarding the economic effects the improvements to the street would have on businesses in the area. Staff responded that two elements of the plan are critical from an economic development perspective—added parking and creating sense of place.

Timeline

The proposed project timeline for the California Avenue – Transit Hub Improvements project is:

No.	Task	Target Date
1	Release RFP for Design Consultant Selection	Feb 2011
2	Begin Design Phase	Apr 2011
3	Outreach to public for final design	March – November 2011
4	Caltrans NEPA Clearance	Sept 2011
5	Review and Approval of Final Design	January – February 2012
6	100% Design	Mar 2012
7	Bid Construction	April 2012
8	Begin Construction	June 2012

Resource Impact

The engineer's estimate for the cost of the California Avenue – Transit Hub Corridor Improvements Project is \$1,725,200. The City received a grant from the VTA CDT Program in the amount of \$1,175,200, which becomes available to the City for use in February 2012. A \$550,000 local match from the Infrastructure Reserve Account will be required as part of the grant requirements.

Staff impacts will be incurred in the amount of time spent to manage and coordinate the hiring of a design consultant and management of the consultant's work during 2011, attendance at public hearings and preparation of staff reports, and management of bid procurement and project construction in 2012. The Planning and Community Environment Department will lead the design effort, with assistance from Public Works, which would then provide construction oversight in 2012. Purchasing staff in Administrative Services would also be involved at various stages to assist with soliciting and administering contracts for design and construction. Cumulatively, staff estimates a staff effort equivalent to 0.25 FTE of a professional position would be devoted to the project over a 2-year period.

Policy Implications

The City's Comprehensive Plan recommends that the City enhance the California Avenue streetscape by upgrading the visual quality of the street to attract additional business and visitors to the area. Consistent with those Comprehensive Plan goals, the proposed streetscape and place-making improvements along California Avenue should ensure continued growth and enhancement of the California Avenue Business District. The Comprehensive Plan also encourages a mix of residential and non-residential uses at a scale of development that is comfortable for pedestrian use. The Plan encourages improving the appearance of the street while preserving its "home town" character. Also, Program L-18 specifically calls out for street improvements that could make a substantial contribution to the character of commercial Centers, including narrowing travel lanes.

Environmental Review

The Initial Study and draft Negative Declaration are attached (Attachment A), and conclude that no significant environmental impacts would result from the project. Approval of the Negative Declaration for the California Avenue Transit Hub Corridor Improvement project is necessary prior to initiating detailed design.

ATTACHMENTS:

- Attachment A: Negative Declaration - CEQA Check List (PDF)
- Attachment B: Hexagon - Cal Av TIA Report (No Appendices) (PDF)
- Attachment C: January 12, 2011 P&TC Staff Report (w/o attachments) (PDF)
- Attachment D: P&TC Excerpt Minutes of January 12, 2011 (PDF)
- Attachment E: Traffic Calming Economics (PDF)
- Attachment F: Cal Ave Streetscape Interviews (PDF)
- Letters from Public (PDF)

Prepared By: Jaime Rodriguez, Chief Transportation Official

Department Head: Curtis Williams, Director

City Manager Approval:


James Keene, City Manager

City of Palo Alto

Department of Planning and Community Environment
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 Palo Alto, CA 94301
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 www.cityofpaloalto.org



Notice of Intent to Adopt a Negative Declaration

A notice, pursuant to the California Environmental Quality Act of 1970, as amended (Public Resources Code 21,000, et sec.) that the following project will not have a significant effect on the environment.

File Number	TAZ	APN(s)	Date
N/A	N/A		December 20, 2010
Project Name		Project Type (Use)	
California Avenue Streetscape Improvements - Phase II		Improvements to Right-of-Way	
Owner		Applicant	
City of Palo Alto		City of Palo Alto, Transportation Division	
Project Location			
The project area is limited to the 100 through 400 blocks of California Avenue, which is bounded by the Caltrain station to the east and El Camino Real to the west.			
Project Description			
<p>The California Avenue Streetscape Improvements (Phase II) project includes the implementation of streetscape treatments along California Avenue between El Camino Real and the Caltrain – Park Blvd Plaza. Project elements include: community identity markers; traffic calming treatments such as speed tables at existing mid-block crosswalk locations, bulb-outs at intersections to reduce crosswalk lengths, and a 4-lane to 2-lane reduction; streetscape elements such as decorative pavement bands to divide parking lanes from parking lanes, outdoor seating areas, enhanced bicycle parking elements, information kiosks, and newspaper racks; landscape improvements; enhanced and additional on-street vehicle parking; and community-focused improvements at the Caltrain – Park Blvd Plaza.</p>			
Purpose of Notice			
<p>The purpose of this notice is to inform you that the City of Palo Alto Planning Staff has recommended that a Negative Declaration be approved for this project. City Planning Staff has reviewed the Initial Study for the project, and based upon substantial evidence in the record, finds that no significant environmental effects will occur. It should be noted that the approval of a Negative Declaration does not constitute approval of the project under consideration. The decision to approve or deny the project will be made separately.</p>			
Public Review Period:	Begins: December 27, 2010	Ends: January 18, 2011	
<p>Public Comments regarding the correctness, completeness, or adequacy of this negative declaration are invited and must be received on or before the end of the public review period. Such comments should be based on specific environmental concerns. Written comments should be addressed to the City of Palo Alto, Planning Department, 250 Hamilton Avenue, Palo Alto, CA 94301. For additional information regarding this Negative Declaration, please contact Clare Campbell at 650-617-3191.</p>			

The Negative Declaration and Initial Study may be viewed at the following locations:

- (1) Planning Department, 250 Hamilton Avenue, Palo Alto, CA 94301
- (2) Development Center, 285 Hamilton Avenue, Palo Alto, CA 94301

Responsible Agencies sent a copy of this document:

NA

Mitigation Measures included in the project to reduce potentially significant impacts to a less than significant level:

NA

A reporting or monitoring program must be adopted for measures to mitigate significant impacts at the time the Negative Declaration is approved, in accord with the requirements of section 21081.6 of the Public Resources Code.

Prepared by:
Clare Campbell, Planner



Signature

12/20/10
Date



City of Palo Alto
Department of Planning and Community Environment
California Environmental Quality Act
DRAFT NEGATIVE DECLARATION

I. DESCRIPTION OF PROJECT

Date: December 20, 2010

Project Name: California Avenue Streetscape Improvements - Phase II

Project Location: The project area is limited to the 100 through 400 blocks of California Avenue, which is bounded by the Caltrain station to the east and El Camino Real to the west.

Applicant: City of Palo Alto, Transportation Division
Jaime Rodriquez, Chief Transportation Official

Owner: City of Palo Alto
250 Hamilton Avenue
Palo Alto, CA 94301

Project Description:

The California Avenue Streetscape Improvements (Phase II) project includes the implementation of streetscape treatments along California Avenue between El Camino Real and the Caltrain – ~~Park Blvd Plaza~~. ~~Project elements include: community identity markers, traffic calming~~ treatments such as speed tables at existing mid-block crosswalk locations, bulb-outs at intersections to reduce crosswalk lengths, and a 4-lane to 2-lane reduction; streetscape elements such as decorative pavement bands to divide parking lanes from parking lanes, outdoor seating areas, enhanced bicycle parking elements, information kiosks, and newspaper racks; landscape improvements; enhanced and additional on-street vehicle parking; and community-focused improvements at the Caltrain – Park Blvd Plaza.

II. DETERMINATION

In accordance with the City of Palo Alto’s procedures for compliance with the California Environmental Quality Act (CEQA), the City has conducted an Initial Study to determine whether the proposed project could have a significant effect on the environment. On the basis of that study, the City makes the following determination:

 X The proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** is hereby adopted.

Although the project, as proposed, could have a significant effect on the environment, there will not be a significant effect on the environment in this case because mitigation measures for traffic impacts have been added to the project and, therefore, a **MITIGATED NEGATIVE DECLARATION** is hereby adopted.

The attached initial study incorporates all relevant information regarding the potential environmental effects of the project and confirms the determination that an EIR is not required for the project.



Project Planner

12-20-10

Date

Adopted by Director of Planning and Community Environment

Date

Signed after the Negative Declaration has been approved

California Avenue Streetscape Improvements

Phase II

Initial Study



Prepared by
City of Palo Alto

December 20, 2010

ENVIRONMENTAL CHECKLIST
City of Palo Alto
Department of Planning and Community Environment

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ENVIRONMENTAL CHECKLIST
Department of Planning and Community Environment

PROJECT DESCRIPTION

1. PROJECT TITLE

California Avenue Streetscape Improvements - Phase II

2. LEAD AGENCY NAME AND ADDRESS

City of Palo Alto
Department of Planning and Community Environment
250 Hamilton Ave.
Palo Alto, CA 94303

3. CONTACT PERSON AND PHONE NUMBER

Clare Campbell, Planner
City of Palo Alto
650-617-3191

4. PROJECT SPONSOR'S NAME AND ADDRESS

City of Palo Alto, Transportation Division
Jaime Rodriguez, Chief Transportation Official

5. APPLICATION NUMBER - NA

6. PROJECT LOCATION

The project site is centrally located in the city of Palo Alto, in the northern part of Santa Clara County, west of U.S. Highway 101 and east of State Route 82 (El Camino Real), as shown on Figure 1, *Regional Map*. The project area is limited to the 100 through 400 blocks of California Avenue, which is bounded by the Caltrain station to the east and El Camino Real to the west, as shown on Figure 2, *Vicinity Map*.

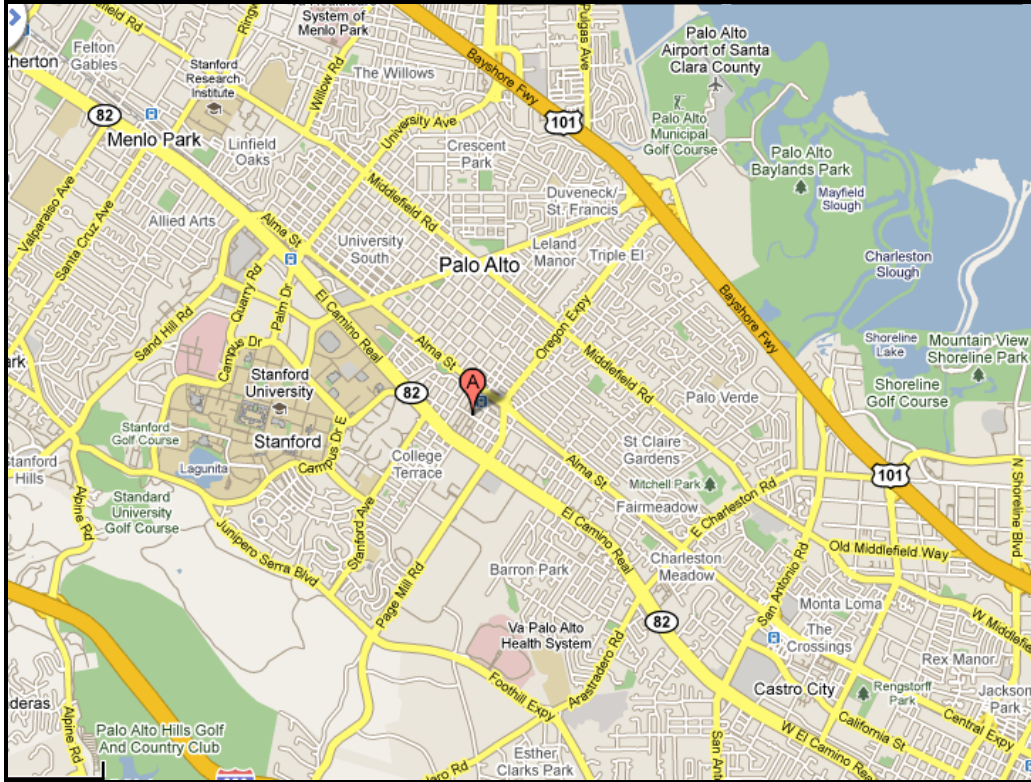


Figure 1: Regional Map

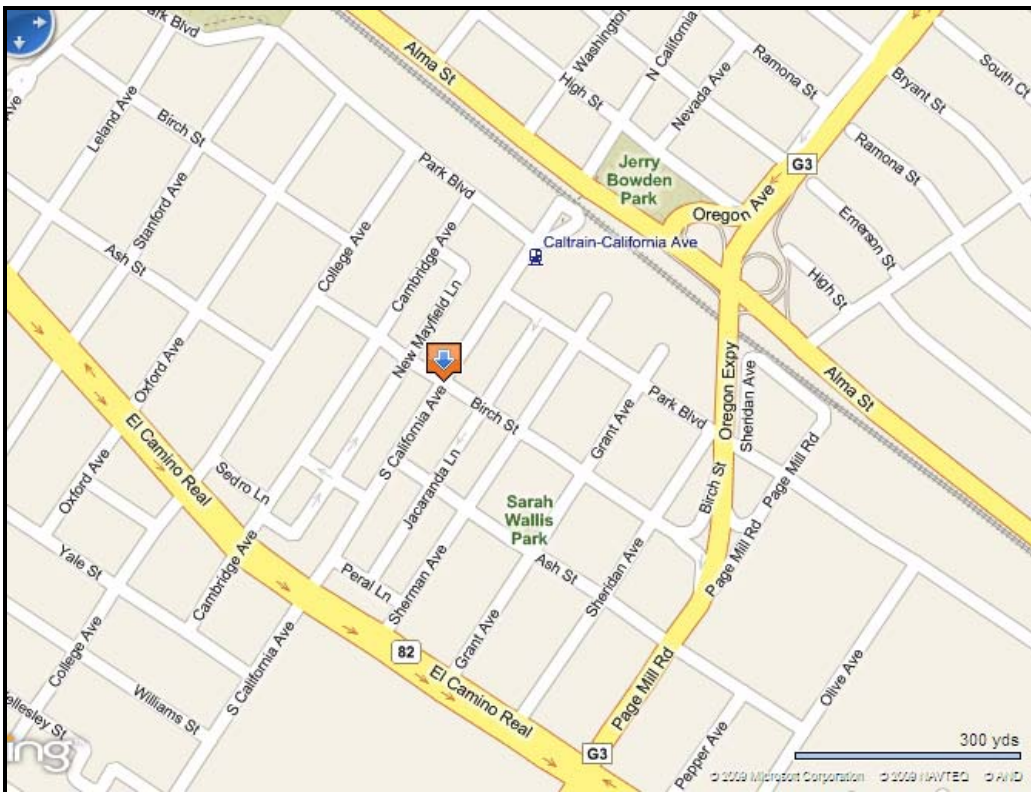


Figure 2: Vicinity Map

7. GENERAL PLAN DESIGNATION

The project area is designated as Regional/Community Commercial in the Palo Alto 1998 – 2010 Comprehensive Plan. This land use designation includes larger shopping centers and districts that have wider variety goods and services than the neighborhood shopping areas. They rely on larger trade areas and include such uses as department stores, bookstores, furniture stores, toy stores, apparel shops, restaurants, theaters, and non-retail services such as offices and banks. California Avenue is designated as a “collector” street in Palo Alto’s roadway hierarchy. This type of roadway collects and distributes local traffic to and from arterial streets and provides access to adjacent properties.

8. ZONING

The project area is zoned CC(2)(R)(P), Community Commercial (2) with a Retail and Pedestrian shopping combining district overlay. The project area also falls within the boundaries of the Pedestrian and Transit Oriented Development (PTOD) overlay district. The project will not result in a change of use and does not conflict with the existing zoning.

The CC Community Commercial district is intended to create and maintain major commercial centers accommodating a broad range of office, retail sales, and other commercial activities of community-wide or regional significance. The CC community commercial district is intended to be applied to regional/community commercial centers identified by the Palo Alto Comprehensive Plan. The community commercial (2) (CC(2)) subdistrict is intended to modify the site development regulations of the CC community commercial district, where applied in combination with such district, to allow site specific variations to the community commercial uses and development requirements in the CC district.

The (R) Retail shopping combining district is intended to modify the uses allowed in a commercial district, where applied in combination with such district, to allow only retail, eating and service oriented commercial development on the ground floors.

The (P) Pedestrian shopping combining district is intended to modify the regulations of the CC community commercial district in locations where it is deemed essential to foster the continuity of retail stores and display windows and to avoid a monotonous pedestrian environment in order to establish and maintain an economically healthy retail district.

The California Avenue Pedestrian and Transit Oriented Development (PTOD) Combining District is intended to allow higher density residential dwellings on commercial, industrial and multi-family parcels within a walkable distance of the California Avenue Caltrain station, while protecting low density residential parcels and parcels with historical resources that may also be located in or adjacent to this area. The combining district is intended to foster densities and facilities that: (1) Support use of public transportation; (2) Encourage a variety of housing types, commercial retail and limited office uses; (3) Encourage project design that achieves an overall context-based development for the PTOD overlay area; (4) Require streetscape design elements that are attractive pedestrians and bicyclists; (5) Increase connectivity to surrounding existing and planned pedestrian and bicycle facilities; and (6) Implement the city’s Housing

Element and Comprehensive Plan. A PTOD combining district may be applied to a parcel through rezoning of the site that is within the specified boundaries of the district.

9. PROJECT DESCRIPTION

The California Avenue Streetscape Improvements (Phase II) project includes the implementation of streetscape treatments along California Avenue between El Camino Real and the Caltrain – Park Blvd Plaza. Project elements include: community identity markers; traffic calming treatments such as speed tables at existing mid-block crosswalk locations, bulb-outs at intersections to reduce crosswalk lengths, and a 4-lane to 2-lane reduction; streetscape elements such as decorative pavement bands to divide parking lanes from parking lanes, outdoor seating areas, enhanced bicycle parking elements, information kiosks, and newspaper racks; landscape improvements; enhanced and additional on-street vehicle parking; and community-focused improvements at the Caltrain – Park Blvd Plaza.

Palo Alto Review Requirements

The proposed project requires Architectural Review by the City of Palo Alto. The project is required to conform to the designated zoning and related Comprehensive Plan polices.

10. SURROUNDING LAND USES AND SETTING

The project area is a commercial zone with a variety of restaurants, retail and grocery stores and is surrounded primarily with similar non-residential uses within a two block radius. Further to the north and south, residential uses become the dominant land use.

11. OTHER PUBLIC AGENCY APPROVALS REQUIRED

Not applicable.

ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. **[A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e. g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e. g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).]**
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “(Mitigated) Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17, “Earlier Analysis,” may be cross-referenced).
- 5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (C)(3) (D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

DISCUSSION OF IMPACTS

The following Environmental Checklist was used to identify environmental impacts, which could occur if the proposed project is implemented. The left-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of the checklist. Discussions of the basis for each answer and a discussion of mitigation measures that are proposed to reduce potential significant impacts are included.

A. AESTHETICS

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a) Substantially degrade the existing visual character or quality of the site and its	1,2,5			X	

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
surroundings?					
b) Have a substantial adverse effect on a public view or view corridor?	1, 2-Map L4, 5			X	
c) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	1, 2-Map L4, 5				X
d) Violate existing Comprehensive Plan policies regarding visual resources?	1,2,5				X
e) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	1,5,6				X
f) Substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21?	1,5,6				X

DISCUSSION:

The proposed project is required by the City of Palo Alto to undergo Architectural Review. The intent of this review is to (1) Promote orderly and harmonious development in the city; (2) Enhance the desirability of residence or investment in the city; (3) Encourage the attainment of the most desirable use of land and improvements; (4) Enhance the desirability of living conditions upon the immediate site or in adjacent areas; and (5) Promote visual environments which are of high aesthetic quality and variety and which, at the same time, are considerate of each other. The proposed improvements are anticipated to have a less than significant aesthetic impact due to the required conformance with the Architectural Review requirements.

Mitigation Measures: None Required

B. AGRICULTURAL AND FOREST RESOURCES

Issues and Supporting Information Resources	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	1				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	1, 2-MapL9				X

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g) ¹) or timberland (as defined in Public Resources Code section 4526 ²)?	1				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?	1				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	1				X

DISCUSSION:

The project area is not located in a “Prime Farmland”, “Unique Farmland”, or “Farmland of Statewide Importance” area, as shown on the maps prepared for the Farmland Mapping and Monitoring Program of the California Resources Agency. The site is not zoned for agricultural use, and is not regulated by the Williamson Act. The project area is within a fully developed urban area and has no impacts on forest or timberland.

Mitigation Measures: None Required

C. AIR QUALITY

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct with implementation of the applicable air quality plan (1982 Bay Area Air Quality Plan & 2000 Clean Air Plan)?	1,5,9				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation indicated by the following:					
i. Direct and/or indirect operational emissions that exceed the Bay Area Air	1,5,9			X	

¹ PRC 12220(g): "Forest land" is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

² PRC 4526: "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis after consultation with the district committees and others.

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Quality Management District (BAAQMD) criteria air pollutants of 80 pounds per day and/or 15 tons per year for nitrogen oxides (NO), reactive organic gases (ROG), and fine particulate matter of less than 10 microns in diameter (PM ₁₀);					
ii. Contribute to carbon monoxide (CO) concentrations exceeding the State Ambient Air Quality Standard of nine parts per million (ppm) averaged over eight hours or 20 ppm for one hour(as demonstrated by CALINE4 modeling, which would be performed when a) project CO emissions exceed 550 pounds per day or 100 tons per year; or b) project traffic would impact intersections or roadway links operating at Level of Service (LOS) D, E or F or would cause LOS to decline to D, E or F; or c) project would increase traffic volumes on nearby roadways by 10% or more)?	1,5,9				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	1,5,9			X	
d) Expose sensitive receptors to substantial levels of toxic air contaminants?	1,5,9				X
i. Probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 10 in one million	1,9				X
ii. Ground-level concentrations of non-carcinogenic TACs would result in a hazard index greater than one (1) for the MEI	1,9				X
e) Create objectionable odors affecting a substantial number of people?	1,9				X
f) Not implement all applicable construction emission control measures recommended in the <i>Bay Area Air Quality Management District CEQA Guidelines</i> ?	1,9				X

DISCUSSION:

Based on the Bay Area Air Quality Management District’s (BAAQMD) thresholds, it is not anticipated that the project would affect any regional air quality plan or standards, or result in a cumulatively considerable net increase of any criteria pollutant. The extent of the effects on air quality will be temporary only, during the period of site preparation and construction. The City of Palo Alto uses the BAAQMD’s Basic Control Measures

to reduce particulate emissions during project construction to a less than significant level. The project and related construction activities are anticipated to have a less than significant impact on air quality.

Mitigation Measures: None Required

D. BIOLOGICAL RESOURCES

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	1, 2-MapN1, 5				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, including federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	1,2-MapN1, 5				X
c) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	1,8-MapN1, 5				X
d) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto’s Tree Preservation Ordinance (Municipal Code Section 8.10)?	1,2,3,4,5				X
e) Conflict with any applicable Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	1,5				X

DISCUSSION:

The project area is located within a fully developed urban setting. There are no sensitive plant or animal species identified in this area.

Mitigation Measures: None Required

E. CULTURAL RESOURCES

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly destroy a local cultural resource that is recognized by City Council resolution?	1,10				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	1,2-MapL8				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	1,2-MapL8				X
d) Disturb any human remains, including those interred outside of formal cemeteries?	1,2-MapL8				X
e) Adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City’s Historic Inventory?	1,2-MapL7, 10				X
f) Eliminate important examples of major periods of California history or prehistory?	1				X

DISCUSSION:

The proposed project involves minor construction activities within the public right-of-way that is located within a fully developed and previously disturbed area. The proposed project will not create any cultural impacts to the affected area. For all projects, if during grading and construction activities, any archaeological or human remains are encountered, construction shall cease and a qualified archaeologist shall visit the site to address the find. The Santa Clara County Medical Examiner’s office shall be notified to provide proper direction on how to proceed. If any Native American resources are encountered during construction, construction shall cease immediately until a Native American descendant, appointed by the Native American Heritage Commission of the State of California, is able to evaluate the site and make further recommendations and be involved in mitigation planning.

Mitigation Measures: None Required

F. GEOLOGY, SOILS AND SEISMICITY

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State	11				X

Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.					
ii) Strong seismic ground shaking?	2-MapN10				X
iii) Seismic-related ground failure, including liquefaction?	2-MapN5				X
iv) Landslides?	2-MapN5				X
b) Result in substantial soil erosion or the loss of topsoil?	1				X
c) Result in substantial siltation?	1				X
d) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	2-MapN5				X
e) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	2-MapN5			X	
f) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	1				X
g) Expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques?	1,5				X

DISCUSSION:

The proposed project includes improvements within the public right of way (sidewalk and road) of a fully developed commercial area. Although the project is located in an area with expansive soils and has a high potential for surface rupture along fault traces and potential for earthquake-induced landslides where sloped, the project scope is limited to improvements at or near the existing grade and is anticipated to not be significantly impacted by the existing geologic conditions. The proposed project would not create any new geology, soils and seismicity impacts.

Generally, the City of Palo Alto would experience a range from weak to very violent shaking in the event of a major earthquake along the San Andreas or Hayward fault. Although hazards exist, development would not expose people or property to major geologic hazards that cannot be addressed through the use of standard engineering design and seismic safety techniques, as required by building codes. With proper engineering new development is not expected to result in any significant adverse short or long-term impacts related to geology, soils or seismicity.

Mitigation Measures: None Required

G. GREENHOUSE GAS EMISSIONS

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	1,5,9			X	
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	1,5,9			X	

DISCUSSION:

The San Francisco Bay Area Air Basin (SFBAAB) is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards. SFBAAB's nonattainment status is attributed to the region's development history. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

The Bay Area Air Quality Management District's (BAAQMD) approach to developing a Threshold of Significance for Green House Gas (GHG) emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant.

The Thresholds of Significance for operational-related GHG emissions are:

- For land use development projects, the threshold is compliance with a qualified GHG reduction Strategy; or annual emissions less than 1,100 metric tons per year (MT/yr) of CO₂e; or 4.6 MT CO₂e/SP/yr (residents + employees). Land use development projects include residential, commercial, industrial, and public land uses and facilities.
- For stationary-source projects, the threshold is 10,000 metric tons per year (MT/yr) of CO₂e. Stationary-source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate. If annual emissions of operational-related GHGs exceed these levels, the proposed project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact to global climate change.

The BAAQMD has established project level screening criteria to assist in the evaluation of impacts. If a project meets the screening criteria and is consistent with the methodology used to develop the screening criteria, then the project's air quality impacts may be considered less than significant. Below

are some screening level examples taken from the BAAQMD CEQA Air Quality Guidelines, 06/2010 (Table 3-1, Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes).

Land Use Type	Operational GHG Screening Size **
Single-family	56 du
Apartment, low-rise	78 du
Apartment, mid-rise	87 du
Condo/townhouse, general	78 du
City park	600 acres
Day-care center	11,000 sf
General office building	53,000 sf
Medical office building	22,000 sf
Office park	50,000 sf
Quality restaurant	9,000 sf

**If project size is => screening size, then it is considered significant.

Based on the types of projects that would be considered to have a significant GHG impact, the proposed project, due to its limited scope, has been determined to not exceed the significance thresholds established by the BAAQMD, and therefore does not have significant impact for creating GHG emissions.

Mitigation Measures: None Required

H. HAZARDS AND HAZARDOUS MATERIALS

*Note: Some of the thresholds can also be dealt with under a topic heading of **Public Health and Safety** if the primary issues are related to a subject other than hazardous material use.*

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routing transport, use, or disposal of hazardous materials?	1,5				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	1,5				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	1,5				X
d) Construct a school on a property that is subject to hazards from hazardous materials contamination, emissions or accidental release?	1,5				X
e) Be located on a site which is included on a list of hazardous materials sites compiled pursuant	1,2-MapN9				X

to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					
f) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	1				X
g) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working the project area?	1				X
h) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	1,2-MapN7				X
i) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	1,2-MapN7				X
j) Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination in excess of soil and ground water cleanup goals developed for the site?	1,5				X

DISCUSSION:

The proposed project is minor in scope and does not involve the use, creation or transportation of hazardous materials. California Avenue is not designated as an evacuation route nor located within or near the wildland fire danger area. The proposed project would have no impacts with regard to public safety, hazards and hazardous materials.

Mitigation Measures: None Required

I. HYDROLOGY AND WATER QUALITY

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	1,2,5				X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have	2-MapN2				X

been granted)?					
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	1,5				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	1,5				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	1,5				X
f) Otherwise substantially degrade water quality?	1,5				X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	2-MapN6				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	2-MapN6				X
i) Expose people or structures to a significant risk of loss, injury or death involve flooding, including flooding as a result of the failure of a levee or dam or being located within a 100-year flood hazard area?	2-MapN8				X
j) Inundation by seiche, tsunami, or mudflow?	2-MapN6				X
k) Result in stream bank instability?	1,5				X

DISCUSSION:

The proposed project includes improvements within the public right of way (sidewalk and road) of a fully developed commercial area and is not anticipated to create any new hydrology and water quality impacts.

All development is required to comply with building codes that address flood safety issues. Development projects are required to implement Best Management Practices (BMPs) for construction activities as specified by the California Storm Water Best Management Practices Handbook (CASQA, 2003) and/or the Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995). The BMPs include measures guiding the management and operation of construction sites to control and minimize the potential contribution of pollutants to storm runoff from these areas. These measures address procedures for controlling erosion and sedimentation and managing all aspects of the construction process to ensure control of potential water pollution sources. All development projects must comply with all City, State and Federal standards pertaining to storm water run-off and water quality.

Mitigation Measures: None Required

J. LAND USE AND PLANNING

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	1,5				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	1,2,3,4,5				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	1,2				X
d) Substantially adversely change the type or intensity of existing or planned land use in the area?	1,5				X
e) Be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height?	1,5				X
f) Conflict with established residential, recreational, educational, religious, or scientific uses of an area?	1,5				X
g) Convert prime farmland, unique farmland, or farmland of statewide importance (farmland) to non-agricultural use?	1,2,3				X

DISCUSSION:

The proposed project involves minor work in the public right-of-way (sidewalk) and does not impact the existing land uses along California Avenue. The improvements are intended to compliment and enhance the existing commercial district and are not anticipated to create any land use impacts.

Mitigation Measures: None Required

K. MINERAL RESOURCES

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	1,2				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	1,2				X

DISCUSSION:

The City of Palo Alto has been classified by the California Department of Conservation (DOC), Division of Mines and Geology (DMG) as a Mineral Resource Zone 1 (MRZ-1). This designation signifies that there are no aggregate resources in the area. The DMG has not classified the City for other resources. There is no indication in the 2010 Comprehensive Plan that there are locally or regionally valuable mineral resources within the City of Palo Alto.

Mitigation Measures: None Required.

L. NOISE

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	1,2,12			X	
b) Exposure of persons to or generation of excessive ground borne vibrations or ground borne noise levels?	1,2,12			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	1,2,12				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	1,2,12			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, would the project expose people residing or working in the project area to excessive noise levels?	1				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	1				X
g) Cause the average 24 hour noise level (Ldn) to increase by 5.0 decibels (dB) or more in an existing residential area, even if the Ldn would remain below 60 dB?	1				X
h) Cause the Ldn to increase by 3.0 dB or more in an existing residential area, thereby causing the Ldn in the area to exceed 60 dB?	1				X
i) Cause an increase of 3.0 dB or more in an existing residential area where the Ldn currently exceeds 60 dB?	1				X
j) Result in indoor noise levels for residential development to exceed an Ldn of 45 dB?	1				X
k) Result in instantaneous noise levels of greater than 50 dB in bedrooms or 55 dB in other rooms in areas with an exterior Ldn of 60 dB or greater?	1				X

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
l) Generate construction noise exceeding the daytime background Leq at sensitive receptors by 10 dBA or more?	1,12				X

DISCUSSION:

All development, including construction activities, must comply with the City’s Noise Ordinance (PAMC Chapter 9.10), which restricts the timing and overall noise levels associated with construction activity. Short-term temporary construction noise that complies with the Noise Ordinance would result in impacts that are expected to be less than significant. The project is located in busy commercial district with an active train station in the immediate vicinity; the existing noise conditions are not quiet and the temporary construction activities will not create any new significant noise impacts.

Mitigation Measures: None Required

M. POPULATION AND HOUSING

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	1				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	1				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	1				X
d) Create a substantial imbalance between employed residents and jobs?	1				X
e) Cumulatively exceed regional or local population projections?	1				X

DISCUSSION:

The proposed project includes improvements within the public right of way (sidewalk and road) of a fully developed commercial area and does not encourage development and therefore will not create any new population and housing impacts.

Mitigation Measures: None Required

N. PUBLIC SERVICES

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
a) Fire protection?	1				X
b) Police protection?	1				X
c) Schools?	1				X
d) Parks?	1				X
e) Other public facilities?	1				X

DISCUSSION:

The proposed project includes improvements within the public right of way (sidewalk and road) of a fully developed commercial area and does not encourage growth and development and is not anticipated to generate new users as to create impacts to the existing public services for the City.

Mitigation Measures: None Required

O. RECREATION

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	1				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	1				X

DISCUSSION:

The proposed project includes improvements within the public right of way (sidewalk and road) of a fully developed commercial area and does not encourage growth and development in the City and is not anticipated to generate new users as to create impacts to the existing City recreational facilities.

Mitigation Measures: None Required

P. TRANSPORTATION AND TRAFFIC

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	1,5,6,8			X	
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	1,5,6,8			X	
c) Result in change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	1,5,6,8			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	1,5,6,8			X	
e) Result in inadequate emergency access?	1,5,6,8			X	
f) Result in inadequate parking capacity?	1,5,6,8				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., pedestrian, transit & bicycle facilities)?	1,2,5,6,8				X
h) Cause a local (City of Palo Alto) intersection to deteriorate below Level of Service (LOS) D and cause an increase in the average stopped delay for the critical movements by four seconds or more and the critical volume/capacity ratio (V/C) value to increase by 0.01 or more?	1,5,6,8			X	
i) Cause a local intersection already operating at LOS E or F to deteriorate in the average stopped delay for the critical movements by four seconds or more?	1,5,6,8			X	
j) Cause a regional intersection to deteriorate from an LOS E or better to LOS F or cause critical movement delay at such an	1,5,6,8			X	

intersection already operating at LOS F to increase by four seconds or more and the critical V/C value to increase by 0.01 or more?					
k) Cause a freeway segment to operate at LOS F or contribute traffic in excess of 1% of segment capacity to a freeway segment already operating at LOS F?	1,5,6,8				X
l) Cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more?	1,5,6,8			X	
m) Cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity? Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at turn lanes at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spillback queues on ramps.	1,5,6,8			X	
n) Impede the development or function of planned pedestrian or bicycle facilities?	1,5,6,8			x	
o) Impede the operation of a transit system as a result of congestion?	1,5,6,8			X	
p) Create an operational safety hazard?	1,5,6,8			x	

DISCUSSION:

The proposed project would reduce the number of travel lanes on California Avenue between El Camino Real and Park Boulevard from four travel lanes to two. In addition to a traffic analysis, an operations and queue analysis of key intersections along California Avenue was completed as part of the traffic analysis for the project and is attached to this Initial Study.

The additional pavement space provided from the lane reduction would be used for streetscape improvements including decorative pavement bands, intersection bulb-outs, and to provide additional on-street parking supply. Most of the parking spaces would be 60-degree angled parking spaces, although some parallel parking will also be provided. At higher volume intersections such as El Camino Real & California Avenue and Birch Street & California Avenue, additional approach lanes are proposed to provide additional intersection capacity for traffic. All existing crosswalks for pedestrians would be maintained with three additional crosswalks provided at the intersections of Park Boulevard & California Avenue. Where bulb-out improvements are proposed, existing crosswalk lengths would be reduced to improve pedestrian operations. The project would also enhance the existing California Avenue Bike Route with the addition of Sharrows stenciled onto the pavement.

The proposed lane reduction was reviewed in accordance with City of Palo Alto and Valley Transportation Authority (VTA) – Congestion Management Program (CMP) guidelines. According to the City of Palo Alto, there are no pending projects or planned projects in the foreseeable future. Therefore, traffic volumes on California Avenue between El Camino Real and Park Boulevard will remain unchanged with the current land uses. An analysis of intersection Level of Service (LOS),

street segment LOS, and intersection queuing was conducted to determine whether the project would result in any significant adverse impacts under project conditions with the lane reduction.

The intersection LOS analyses show no significant impact from the proposed lane reduction along California Avenue. The roadway segment LOS analyses also show no significant impact from the proposed lane reduction along California Avenue. The queue length and overall operations analysis though did yield several optional improvements to the City's proposed conceptual plan line to help improve operations under the proposed two-lane condition including:

- At California Avenue the existing two-lane to three-lane westbound approach to the El Camino Real intersection may be maintained to help provide adequate storage capacity for at least 200 feet from the intersection. This would result in the loss of the 5 new on-street parking spaces along the north side of California Avenue but still allows for the maintenance of the existing 12 on-street parking spaces in the segment providing for no overall parking loss.
- The proposed crosswalk additions at the intersections of California Avenue & Park Boulevard should be reviewed to ensure that wheelchair ramps can be installed in accordance with American Disabilities Act requirements.
- The City's proposed California Avenue plan line concept proposes to maintain the existing two-lane westbound approach at Birch Street. Two lanes are also proposed for maintenance immediately west of Birch Street approaching the midblock crosswalk west of the Birch Street intersection. To eliminate the need for lane merging along California Avenue, the westbound curb lane may be converted to a dedicated right turn only lane to northbound Birch Street.
- The City's proposed California Avenue plan line concept also proposed to maintain the existing two receiving lanes for eastbound California Avenue at El Camino Real. Only one receiving lane is required because at any given time only one lane from either the west side of El Camino Real, the southbound left turn approach of El Camino Real, or the northbound right turn approach of El Camino Real feed traffic onto California Avenue. The existing curb lane approaching the first midblock crosswalk of the project area may be removed to eliminate the need for lane merging. The curb lane can be converted to a bus duckout for the existing Stanford Marguerite shuttle stop at the intersection. This design would eliminate a stopped bus from blocking through traffic and help to avoid operations impacts to the El Camino Real & California Avenue intersection.
- Three proposed on-street parking segments on California Avenue do not meet the City's existing parking standards. Their adjacent lane widths are too narrow for vehicles to back out of angled parking spaces. To comply with the City's parking standards, these segments could be reconfigured to 45-degree parking stalls. The three parking segments are as follows:
 - The proposed four angled parking spaces in the same location of the proposed Optional Outside Seating/Community Stage area on the south side of California Avenue between Ash Street and the mid-block crosswalk immediately west of Ash Street. Changing these parking spaces from 60-degrees to 45-degrees does not result in a loss of proposed on-street parking spaces within this street segment.

- The proposed six angled parking spaces along the north side of California Avenue between Park Boulevard and the driveway entrance to the Molly Stone market. Changing these parking spaces from 60-degrees to 45-degrees results in the loss of one new parking space providing five spaces instead. This is still one space more than the existing four parking spaces under existing conditions.
- The proposed eight angled parking spaces along the south side of California Avenue between Park Boulevard (East) and Park Boulevard (West). Changing these parking spaces from 60-degrees to 45-degrees results in the loss of two new parking spaces providing six spaces instead. This is still one space more than the existing five parking spaces under existing conditions.

Mitigation: None Required

Q. UTILITIES AND SERVICE SYSTEMS

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	1,5				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	1,5				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	1,5				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	1,5				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	1,5				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	1,5				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	1,5				X
h) Result in a substantial physical deterioration of a public facility due to increased use as a result of the project?	1,5				X

DISCUSSION:

The proposed project does not encourage growth and development and therefore no increase in the demand on existing utilities and service systems or impacts to these services are expected.

Mitigation Measures: None Required

R. MANDATORY FINDINGS OF SIGNIFICANCE

Issues and Supporting Information Resources Would the project:	Sources	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	1,2,3,4,7,10			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	1			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	1,5			x	

DISCUSSION:

The proposed improvements are anticipated to transform California Avenue between El Camino Real and California Avenue Caltrain station into a community corridor with transit, bicycle and pedestrian focused transportation treatments; renovate the California Avenue Caltrain Plaza into a vibrant hub for bicycle commuters and visitors; and provide best practice pedestrian-scaled improvements throughout the corridor to spur on going economic development activity and growth. As discussed in the Biological Resources section, this project does not impact sensitive wildlife or plant habitats. The goal of the project is intended to enhance the visitor’s experience and create an inviting and welcoming commercial district.

The project’s cumulative impacts are limited to the GHG emissions. A project of this minor scope is not anticipated to create cumulatively considerable impacts of any other nature. See the Greenhouse Gas Emissions section for further discussion.

SOURCE REFERENCES

1. Project Planner's knowledge of the site and the proposed project
2. Palo Alto Comprehensive Plan, 1998-2010
3. Palo Alto Municipal Code, Title 18 – Zoning Ordinance
4. Palo Alto Tree Technical Manual, Municipal Code Chapter 8.10.030, June 2001
5. Project Plans
6. Project Transportation Engineer's knowledge of the site and the proposed project
7. Not used
8. Traffic Impact Analysis, prepared by Hexagon Transportation Consultants, 12/14/2010
9. California Environmental Quality Act Air Quality Guidelines, June 2010 (BAAQMD)
10. Palo Alto Historic Resources Inventory
11. Alquist-Priolo Earthquake Fault Zoning Map
12. Palo Alto Municipal Code, Section 9.10-Noise Ordinance

ATTACHMENTS

(available on the City of Palo Alto web page: www.cityofpaloalto.org/calave)

- A. Project Plans
- B. Traffic Impact Analysis, 12/14/2010
- C. MTC Capital Grant Application, 10/04/2010

DETERMINATION

On the basis of this initial evaluation:

<p>I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.</p>	<p>X</p>
<p>I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.</p>	
<p>I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.</p>	
<p>I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.</p>	
<p>I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.</p>	

Project Planner

Date



HEXAGON TRANSPORTATION CONSULTANTS, INC.

California Avenue Lane Reduction

Transportation Impact Analysis

Prepared for:

City of Palo Alto

December 14, 2010



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Executive Summary

This report presents the results of the transportation impact analysis conducted for the proposed California Avenue lane reduction in Palo Alto, California. The proposed project would reduce the number of travel lanes on California Avenue between El Camino Real and Park Boulevard from four travel lanes to two. An operations and queue analysis of key intersections along California Avenue is also provided.

The additional pavement space provided from the lane reduction would be used for streetscape improvements including decorative pavement bands, intersection bulb-outs, and to provide additional on-street parking supply. Most of the parking spaces would be 60-degree angled parking spaces, although some parallel parking will also be provided. At higher volume intersections such as El Camino Real & California Avenue and Birch Street & California Avenue, additional approach lanes are proposed to provide additional intersection capacity for traffic. All existing crosswalks for pedestrians would be maintained with three additional crosswalks provided at the intersections of Park Boulevard & California Avenue. Where bulb-out improvements are proposed, existing crosswalk lengths would be reduced to improve pedestrian operations. The project would also enhance the existing California Avenue Bike Route with the addition of Sharrows stenciled onto the pavement.

The proposed lane reduction was reviewed in accordance with City of Palo Alto and Valley Transportation Authority (VTA) – Congestion Management Program (CMP) guidelines. According to the City of Palo Alto, there are no pending projects or planned projects in the foreseeable future. Therefore, traffic volumes on California Avenue between El Camino Real and Park Boulevard will remain unchanged with the current land uses. An analysis of intersection Level of Service (LOS), street segment LOS, and intersection queuing was conducted to determine whether the project would result in any significant adverse impacts under project conditions with the lane reduction.

The intersection LOS analyses show no significant impact from the proposed lane reduction along California Avenue. The roadway segment LOS analyses also show no significant impact from the proposed lane reduction along California Avenue. The queue length and overall operations analysis though did yield several optional improvements to the City's proposed conceptual plan line to help improve operations under the proposed two-lane condition including:

- At California Avenue the existing two-lane to three-lane westbound approach to the El Camino Real intersection may be maintained to help provide adequate storage



capacity for at least 200 feet from the intersection. This would result in the loss of the 5 new on-street parking spaces along the north side of California Avenue but still allows for the maintenance of the existing 12 on-street parking spaces in the segment providing for no overall parking loss.



- The proposed crosswalk additions at the intersections of California Avenue & Park Boulevard should be reviewed to ensure that wheelchair ramps can be installed in accordance with American Disabilities Act requirements.



- The City's proposed California Avenue plan line concept proposes to maintain the existing two-lane westbound approach at Birch Street. Two lanes are also proposed for maintenance immediately west of Birch Street approaching the mid-block crosswalk west of the Birch Street intersection. To eliminate the need for lane merging along California Avenue, the westbound curb lane may be converted to a dedicated right turn only lane to northbound Birch Street.



- The City's proposed California Avenue plan line concept also proposed to maintain the existing two receiving lanes for eastbound California Avenue at El Camino Real. Only one receiving lane is required because at any given time only one lane from either the west side of El Camino Real, the southbound left turn approach of El Camino Real, or the northbound right turn approach of El Camino Real feed traffic onto California Avenue. The existing curb lane approaching the first mid-block crosswalk of the project area may be removed to eliminate the need for lane merging. The curb lane can be converted to a bus duckout for the existing Stanford Marguerite shuttle stop at the intersection. This design would eliminate a stopped bus from blocking through traffic and help to avoid operations impacts to the El Camino Real & California Avenue intersection.



- Three proposed on-street parking segments on California Avenue do not meet the City's existing parking standards providing adjacent lane widths that are too narrow for vehicles to back out of angled parking spaces. To comply with the City's parking standards these segments could be reconfigured to 45-degree parking stalls. The three parking segments are as follows:



- The proposed four angled parking spaces in the same location of the proposed Optional Outside Seating/Community Stage area on the south side of California Avenue between Ash Street and the mid-block crosswalk immediately west of Ash Street. Changing these parking spaces from 60-degrees to 45-degrees does not result in a loss of proposed on-street parking spaces within this street segment.



- The proposed six angled parking spaces along the north side of California Avenue between Park Boulevard and the driveway entrance to the Molly Stone market. Changing these parking spaces from 60-degrees to 45-





degrees results in the loss of one new parking space providing five spaces instead. This is still one space more than the existing four parking spaces under existing conditions.



- The proposed eight angled parking spaces along the south side of California Avenue between Park Boulevard (East) and Park Boulevard (West). Changing these parking spaces from 60-degrees to 45-degrees results in the loss of two new parking spaces providing six spaces instead. This is still one space more than the existing five parking spaces under existing conditions.





1. Introduction

This report presents the results of the transportation impact analysis conducted for the proposed California Avenue lane reduction in Palo Alto, California. The proposed project would reduce the number of travel lanes on California Avenue between El Camino Real and Park Boulevard from four travel lanes to two. An operations and queue analysis of key intersections along California Avenue is also provided.

The additional pavement space provided from the lane reduction would be used for streetscape improvements including decorative pavement bands, intersection bulb-outs, and to provide additional on-street parking supply. Most of the parking spaces would be 60-degree angled parking spaces, although some parallel parking will also be provided. At higher volume intersections such as El Camino Real & California Avenue and Birch Street & California Avenue, additional approach lanes are proposed to provide additional intersection capacity for traffic. All existing crosswalks for pedestrians would be maintained with three additional crosswalks provided at the intersections of Park Boulevard & California Avenue. Where bulb-out improvements are proposed, existing crosswalk lengths would be reduced to improve pedestrian operations. The project would also enhance the existing California Avenue Bike Route with the addition of Sharrows stenciled onto the pavement. The project study area and study intersections are shown on Figures 1 & 2.

Scope of Study

The proposed lane reduction was reviewed in accordance with City of Palo Alto and Valley Transportation Authority (VTA) – Congestion Management Program (CMP) guidelines. The study included an analysis of traffic conditions for one signalized intersection, six unsignalized intersections, and the California Avenue corridor from El Camino Real to the Caltrain Station past Park Boulevard. The study intersections are identified below.

Study Intersections

1. El Camino Real and California Avenue (signal)
2. Ash Street and California Avenue (3-way STOP)
3. Birch Street and California Avenue (4-way STOP)
4. Park Boulevard (W) and California Avenue (3-way STOP)

5. Park Boulevard (E) and California Avenue (3-way STOP)
6. Birch Street and Cambridge Avenue (4-way STOP)
7. Birch Street and Sherman Avenue (4-way STOP)

The segment lane capacity was reviewed for the following roadway segments within the project area:

- California Avenue between El Camino Real and Ash Street
- California Avenue between Ash Street and Birch Street
- California Avenue between Birch Street and Park Boulevard (W)
- California Avenue between Park Boulevard (W) and Park Boulevard (E)

Traffic conditions were analyzed for three weekday time periods: AM peak-hour (one hour between 7 AM – 9 AM), Mid-day peak-hour (one hour between 11:30 AM – 1:30 PM), and PM peak hour (one hour between 4 PM – 6 PM). Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing traffic volumes were obtained from tube count and manual turning movement count data obtained in November 2010.

Scenario 2: *Project Conditions.* The intersections and street segments were evaluated with the proposed lane reductions. Project conditions were evaluated relative to existing conditions in order to determine potential project impacts.

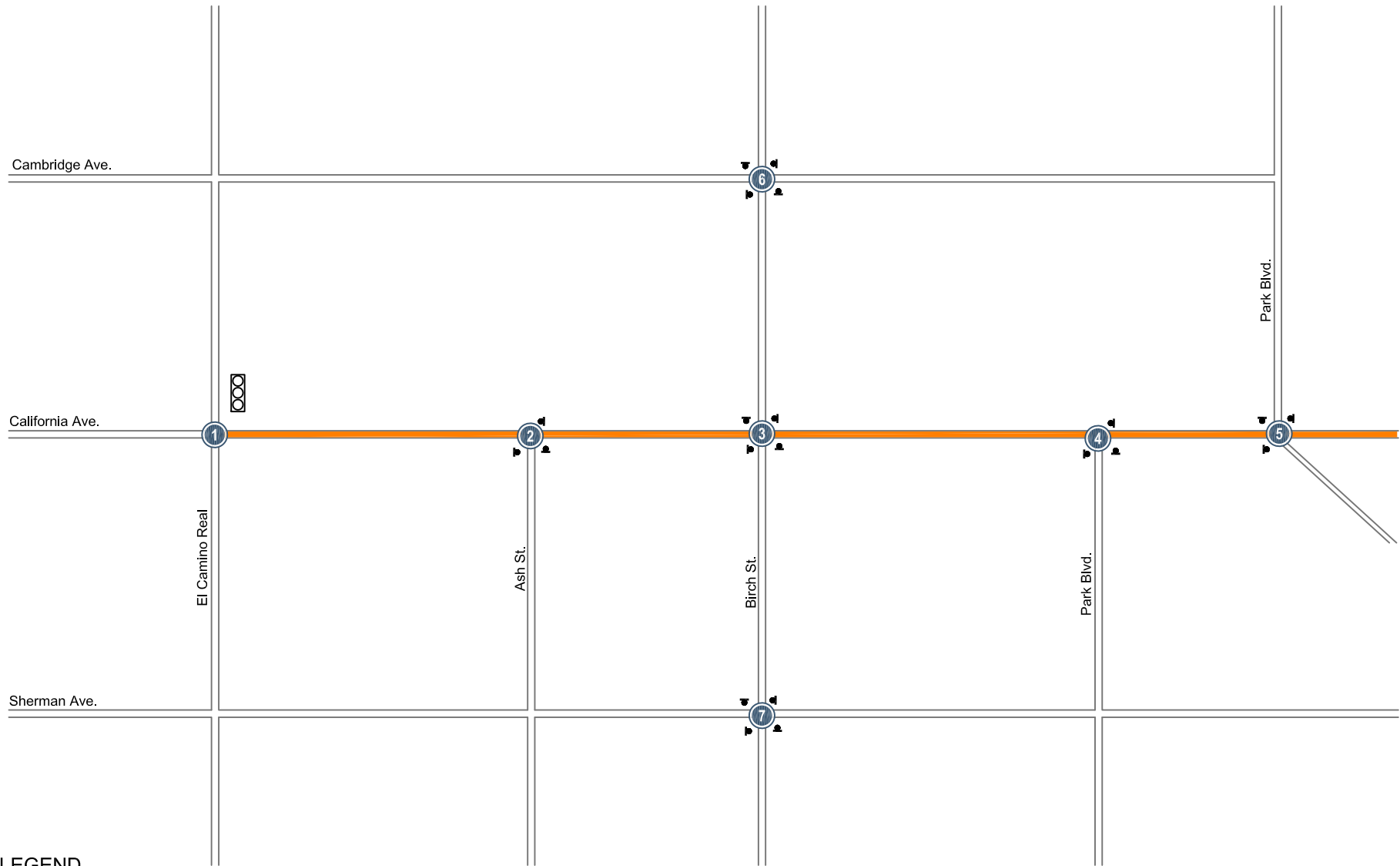
Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.


Data Requirements

The data required for the analysis were obtained from the City of Palo Alto and field observations. The following data were collected from these sources:

- existing traffic volumes
- lane configurations
- signal timing and phasing (for signalized intersections)
- existing and future bicycle facilities
- existing transit service
- travel time runs



LEGEND

 = Study Segment / Project Area


 = Study Intersection

Figure 1
Project Location and Study Intersections



Figure 2
Project Location Aerial

Level of Service Standards and Analysis Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below. The City of Palo Alto level of service standard for intersections is LOS D or better.

Signalized Intersections

Level of service at signalized intersections in the City of Palo Alto is based on the 2000 *Highway Capacity Manual* (2000 HCM) method. The software called TRAFFIX is used to apply this 2000 HCM operations method for evaluation of conditions at signalized intersections. The 2000 HCM method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. *Control delay* is the amount of delay that is attributed to the particular traffic control device at the intersection, and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The correlation between average delay and level of service is shown in Table 1.

Table 1
Signalized Intersection LOS based on Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p10-16.

Unsignalized Intersections

Level of service at unsignalized intersections also is based on the *2000 Highway Capacity Manual* (2000 HCM) method. The TRAFFIX software is used to apply the 2000 HCM operations method for evaluation of conditions at unsignalized intersections. The delay and corresponding level of service at unsignalized, stop-controlled intersections is presented in Table 2. The reported LOS represents the average delay of all intersection movements.

Table 2
Unsignalized Intersection LOS Based on Delay

Level of Service	Description	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p17-2.

Link Level of Service

Roadway links were analyzed using volume to capacity (V/C) ratios. The volume was measured in the field using recent traffic counts. The volumes used for the analysis were based on the day of the week with the highest daily traffic volume, which for all study segments was Friday, November 5th 2010. Using the highest day's traffic data, the counts were further disaggregated into AM, Midday, and PM peak hour volumes. The capacity of each study segment was derived from the *Highway Capacity Manual, 2000* published by the Transportation Research Board. According to the *Highway Capacity Manual*, an urban minor arterial (Class 4) has an approximate capacity of 800 vehicles per hour (Table 10-7). However, because of the presence of on-street parking, an additional reduction in capacity was applied per the publication, *Parking*, by Weant and Levinson (Table 11-1). Thus, for this analysis, each two lane directional segment was assumed to have a capacity of approximately 1,360 vehicles per hour and each one lane directional segment was assumed to have a capacity of 560 vehicles per hour. For each link, the peak hourly volume was divided by the capacity to calculate a V/C ratio. This was then correlated to a level of service per Table 3.

Intersection Queuing

A queuing analysis was conducted for high-demand movements at intersections. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of “n” vehicles for a vehicle movement using the following formula:

$$\text{Probability (X=n)} = \frac{\lambda^n e^{-\lambda}}{n!}$$

Where:

Probability (X=n) = probability of “n” vehicles in queue per lane

n = number of vehicles in the queue per lane

λ = Average number of vehicles in queue per lane (vehicles per hour per lane/signal cycles per hour)

**Table 3
Roadway Segment LOS based on Volume-to-Capacity Ratio**

Level of Service	Description	Volume-to-Capacity (V/C) Ratio
A	Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	less than 0.269
B	Speeds at the free-flow speed are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.	0.270 - 0.439
C	Speeds at or near the free-flow speed of the roadway prevail. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more vigilance on the part of the driver.	0.440 - 0.639
D	Speeds begin to decline slightly with increased flows at this level. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.	0.640 - 0.849
E	At this level, the roadway operates at or near capacity. Operations in this level are volatile, because there are virtually no usable gaps in the traffic stream, leaving little room to maneuver within the traffic stream.	0.850 - 0.999
F	Vehicular flow breakdowns occurs. Large queues form behind breakdown points.	1.000 and greater



The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement.



Report Organization

The remainder of this report is divided into four chapters. Chapter 2 describes the existing transportation system including the roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 describes the impact of the proposed project on the transportation system. Chapter 4 presents the conclusions and recommendations of the transportation analysis.





2. Existing Conditions

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

California Avenue runs at a diagonal to the ordinal directions, but will be considered to run east-west in this study. The segment of California Avenue included in this study extends four blocks from El Camino Real to the California Avenue train station. The cross-streets along this segment are Ash Street, Birch Street, and Park Boulevard. There are STOP signs for all movements at each of the cross-streets. California Avenue has four 9-foot travel lanes, two in each direction, along this segment. There is on-street parking on both sides – some diagonal and some parallel. California Avenue has sidewalks on both sides of the street and serves mostly retail businesses. Parking for the businesses is provided either on-street or in parking lots and garages behind the buildings.

El Camino Real will be considered to run north-south in this study. El Camino Real is a six-lane arterial and designated State Highway 82. The intersection of El Camino Real with California Avenue is controlled by an 8-phase signal, with left turn pockets on all approaches. There are cross-walks with pedestrian heads on all legs of the intersection.

Ash Street will be considered to run north-south in this study. It has one travel lane in each direction and on-street parking.

Birch Street will be considered to run north-south in this study. North of California Avenue it has one travel lane in each direction and on-street parking. South of California Avenue it has two travel lanes in each direction and no on-street parking.

Park Boulevard will be considered to run north-south in this study. It has one travel lane in each direction, on-street parking, and bike lanes. The two pieces of Park Boulevard north and south of California Avenue are off-set by about 200 feet, forming two separate intersections.

Cambridge Avenue runs parallel to California Avenue on the north side. It has one travel lane in each direction and on-street parking. Its intersection with El Camino Real is not

signalized but allows all movements. Cambridge Avenue provides access to three parking lots and two garages serving the surrounding commercial development.

Sherman Avenue runs parallel to California Avenue on the south side. It has one travel lane in each direction and on-street parking. The intersection of Sherman Avenue and El Camino Real is unsignalized and allows right turns only. Sherman Avenue provides access to three parking lots serving the surrounding commercial development.

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were determined by observations in the field and confirmed by City staff. The existing intersection lane configurations are shown on Figure 3. For the most part, the intersections have two lanes in each direction on California Avenue. The exceptions are the eastern Park Boulevard intersection, which has only one westbound lane, and the El Camino Real intersection, which has one left-turn lane, one through lane, and one right turn lane in the westbound direction. Although present, the right turn lane is only 50 feet long.

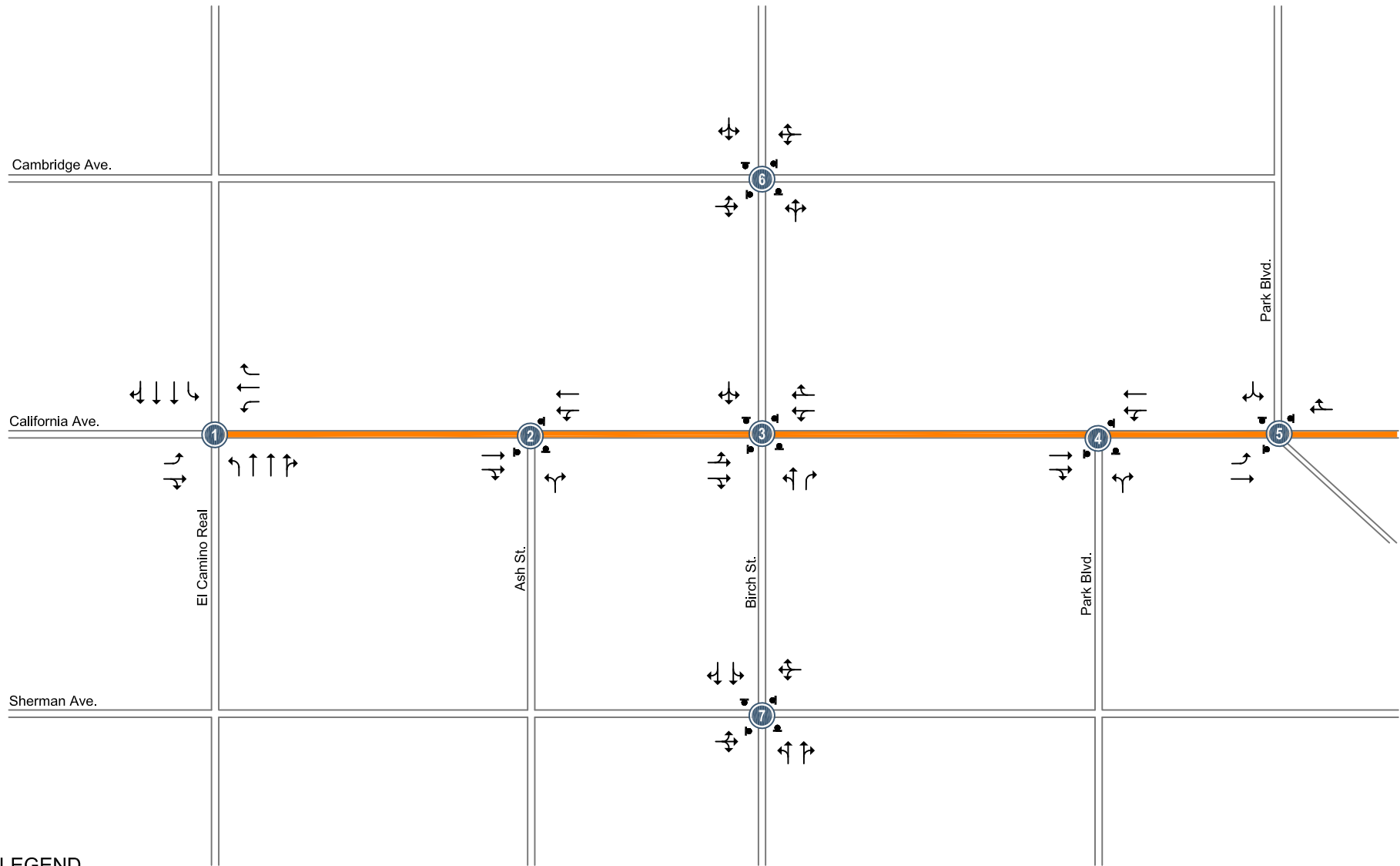
Existing Traffic Volumes

Daily and peak hour traffic counts were collected in November 2010 at all the study intersections and street segments (see Figures 4 and 5). Daily volume on California Avenue ranges from 2,800 to 5,300 vehicles, with the higher volume nearer El Camino Real. The parallel streets of Cambridge Avenue (2,100 – 3,000 vehicles per day) and Sherman Avenue (1,800 – 2,600 vehicles per day) carry lower volume. These volumes are typical of two to four-lane commercial streets.

Existing Bicycle and Pedestrian Facilities

Within the study area, California Avenue is a designated bike route. Just west of the study area, on the other side of El Camino Real, California Avenue has striped bike lanes. Also within the study area Park Boulevard has striped bike lanes. The project would enhance the California Avenue bike route, with Sharrows painted on the pavement, to provide a continuous bicycle connection to the Caltrain Station and to the Park Boulevard bike lanes. The existing peak-hour bicycle volumes at the study intersections are shown on Figure 6.

Pedestrian facilities in the project area consist of sidewalks along all streets in the study area and crosswalks at the intersections. The intersections at El Camino Real, Ash Street, and Birch Street have crosswalks on all legs. The intersections at Park Boulevard have some legs without crosswalks. In addition, there are four mid-block crosswalks across California Avenue between the cross-streets. Thus, there are opportunities to cross California Avenue every 275 feet or less. Based on field observations, there are many pedestrians using the sidewalks and crosswalks during peak hours. The existing peak-hour pedestrian volumes at the study intersection crosswalks are shown on Figure 7.



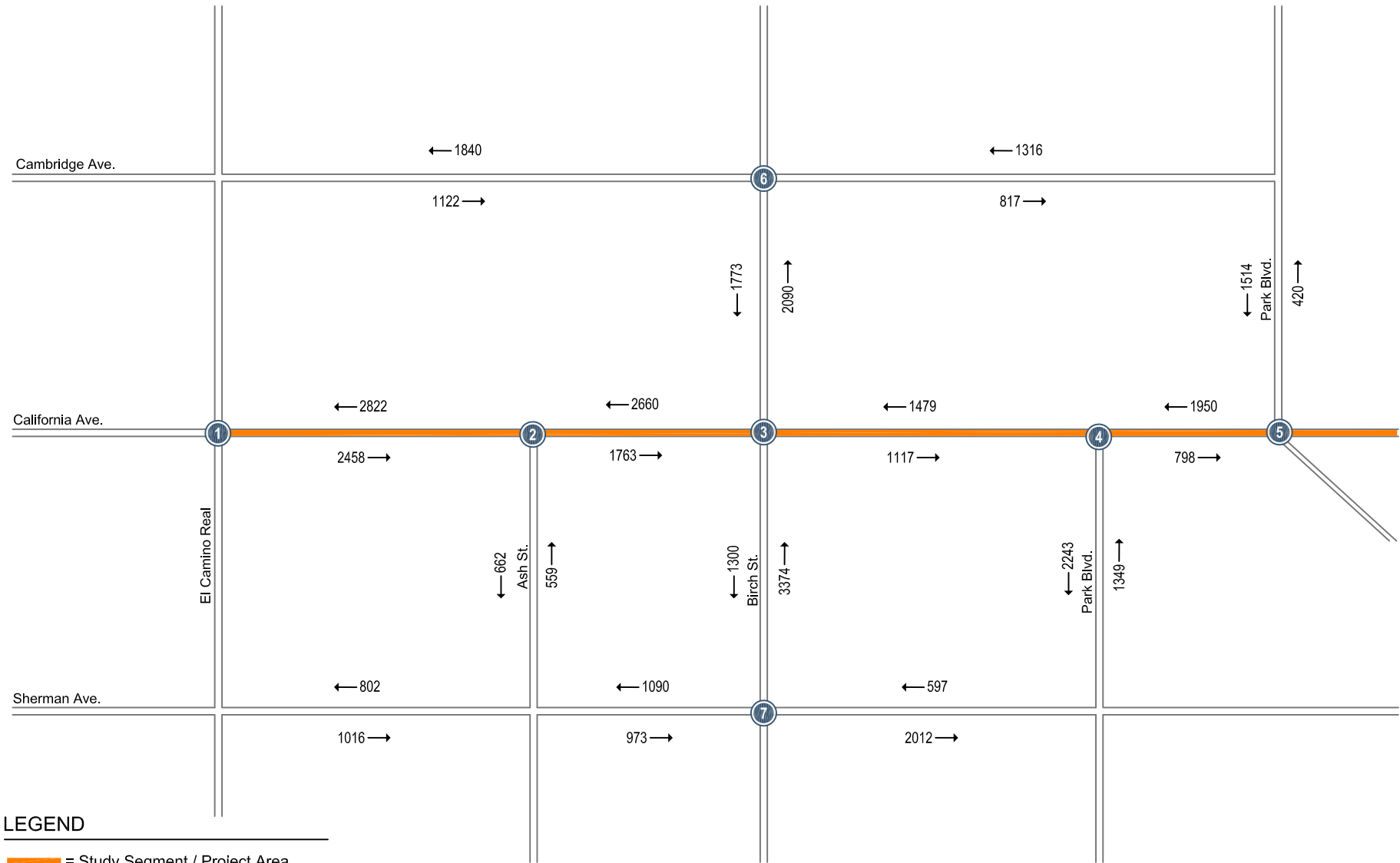
LEGEND

= Study Segment / Project Area

= Study Intersection

Figure 3
Existing Intersection Lane Configurations

California Avenue Lane Reduction



LEGEND



-  = Study Segment / Project Area
-  = Study Intersection
- XX = Weekday Average Daily Traffic Volumes

Figure 4
Existing Roadway Segment ADT

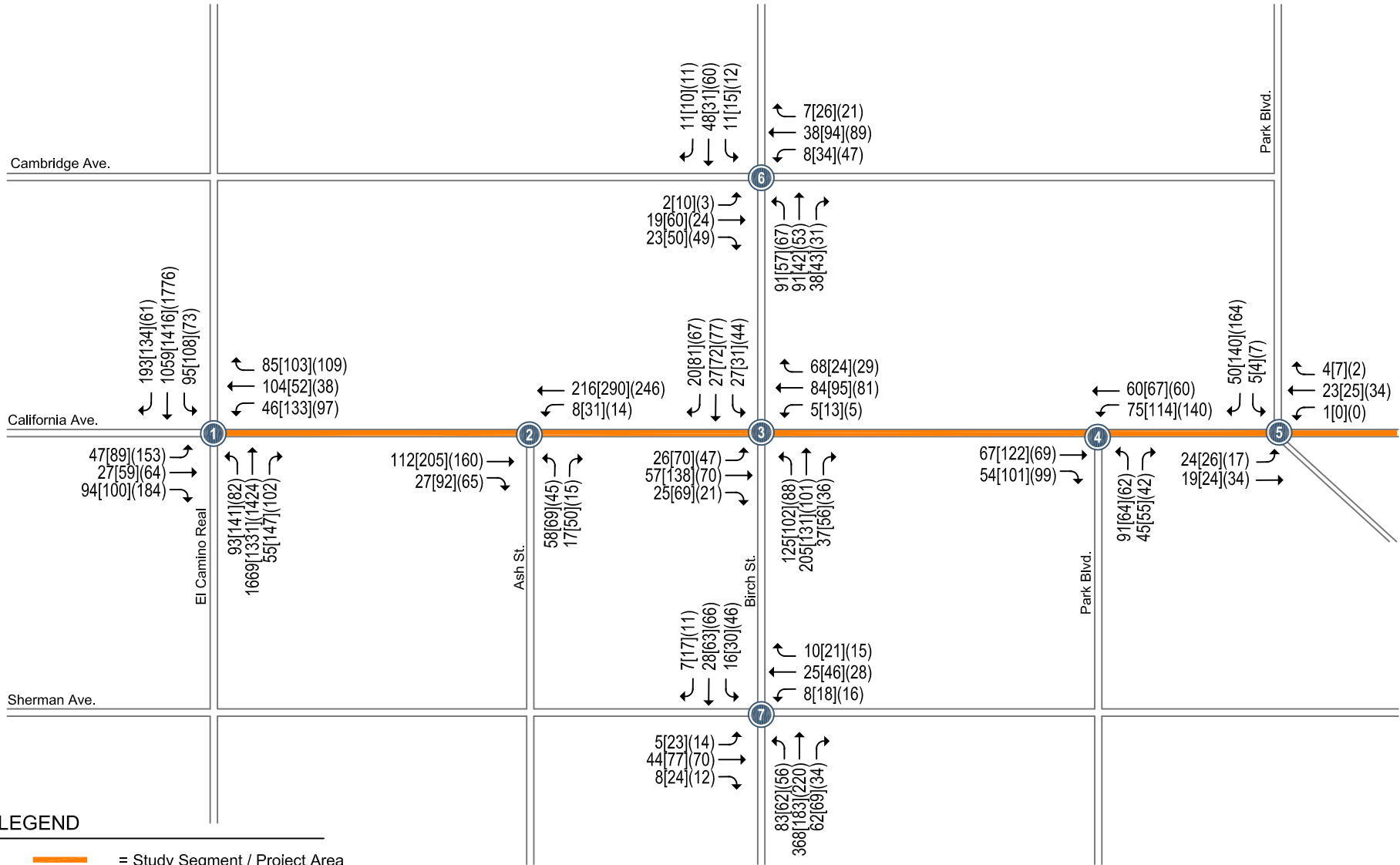


Figure 5
Existing Peak-Hour Traffic Volumes

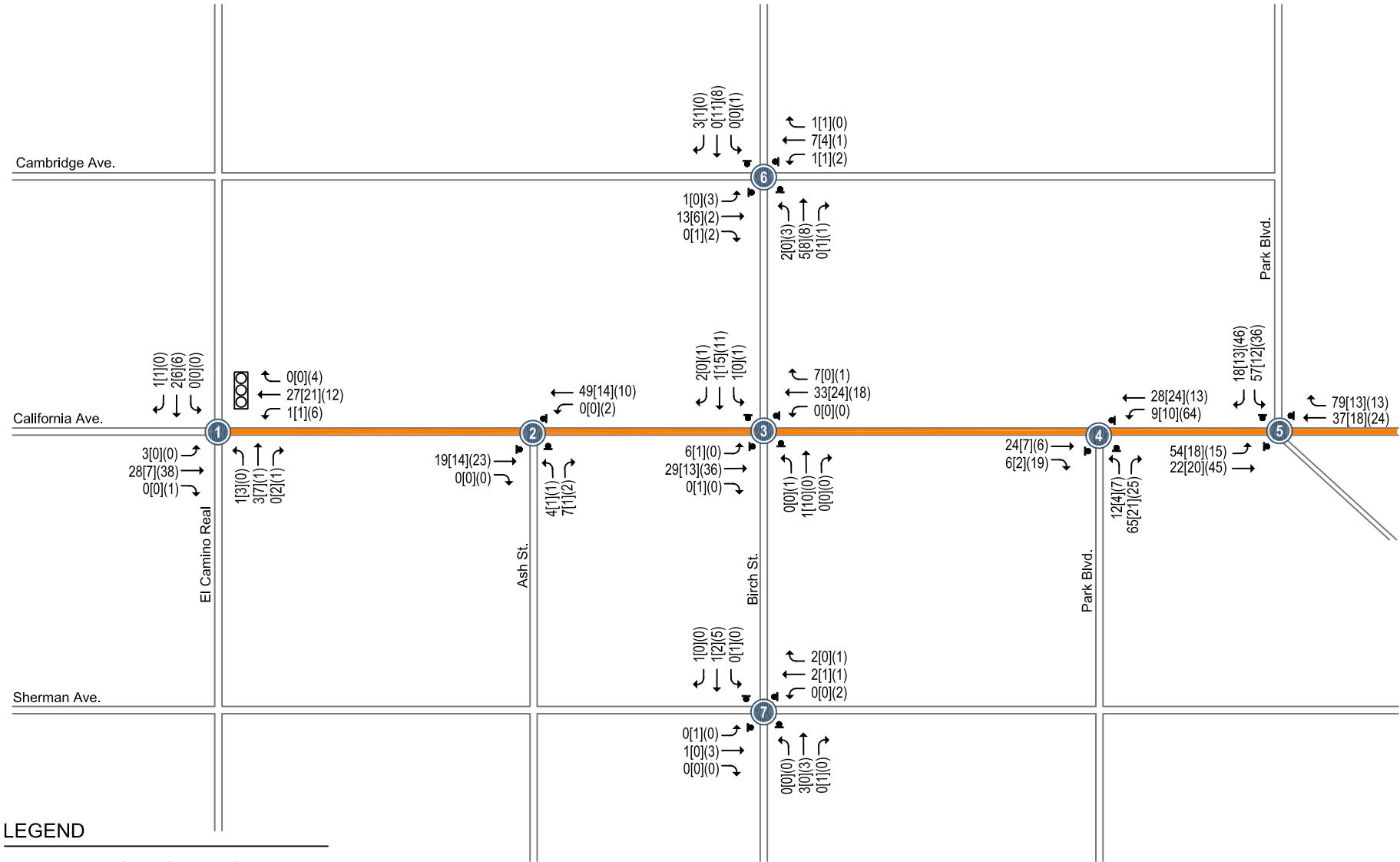
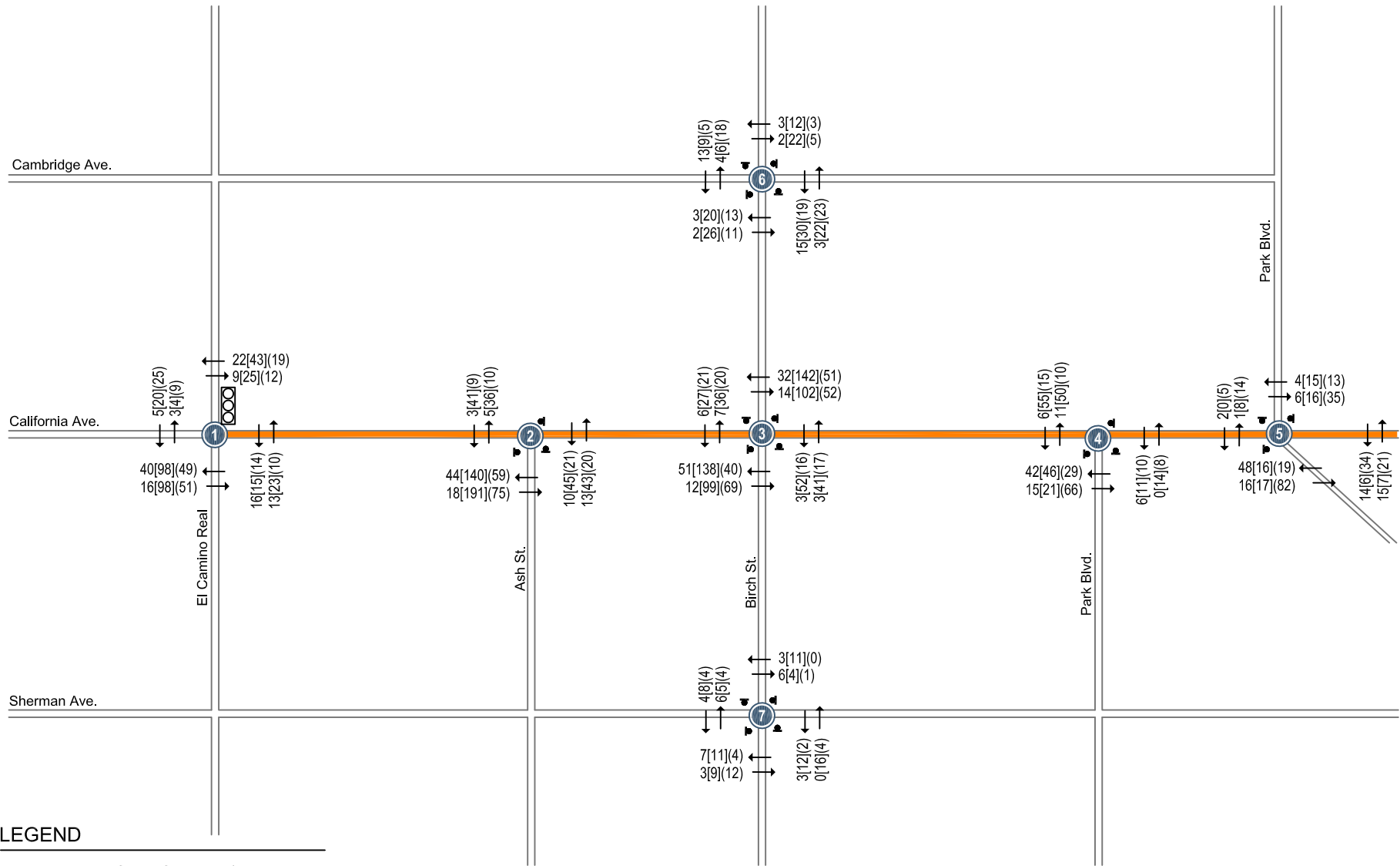


Figure 6
Existing Peak-Hour Bicycle Volumes

California Avenue Lane Reduction



LEGEND

= Study Segment / Project Area

= Study Intersection

XXXX = AM[Midday](PM) Peak-Hour Pedestrian Volumes

Figure 7
Existing Peak-Hour Pedestrian Volumes

Existing Transit Service

Existing transit service in the study area is provided by Caltrain, the Santa Clara Valley Transportation Agency (VTA), and the Stanford Marguerite shuttle. The California Avenue Caltrain station is located at the terminus of California Avenue, which provides access to the park-and-ride lot. There are two bus lines that operate on California Avenue: VTA Route 89, which provides access from the Caltrain station to the Stanford industrial park, and Marguerite Shuttle Route C, which provides access from Caltrain to the Stanford University campus. In addition, there are seven VTA bus lines that operate on El Camino Real and stop near California Avenue.

Existing Intersection Levels of Service

Intersection level of service calculations show that the study intersections all operate at LOS C or better during peak hours (see Table 4). These levels of service are indicative of acceptable operations with little congestion. The STOP controlled intersections all operate at LOS A or B. The signalized intersection of California Avenue and El Camino Real operates at LOS C.

Table 4
Existing Intersection Levels of Service

Study Number	Intersection	Peak Hour	Count Date	Ave. Delay	LOS
1	El Camino Real and California Avenue	AM	11/10/10	24.7	C
		Midday	11/10/10	28.8	C
		PM	11/10/10	30.5	C
2	Ash Street and California Avenue	AM	11/09/10	8.2	A
		Midday	11/09/10	9.1	A
		PM	11/09/10	8.4	A
3	Birch Street and California Avenue	AM	11/10/10	11.1	B
		Midday	11/10/10	10.9	B
		PM	11/10/10	9.8	A
4	Park Boulevard (W) and California Avenue	AM	11/10/10	8.2	A
		Midday	11/10/10	8.4	A
		PM	11/10/10	8.4	A
5	Park Boulevard (E) and California Avenue	AM	11/04/10	7.2	A
		Midday	11/04/10	7.3	A
		PM	11/04/10	7.4	A
6	Birch Street and Cambridge Avenue	AM	11/03/10	8.2	A
		Midday	11/03/10	8.3	A
		PM	11/03/10	8.3	A
7	Birch Street and Sherman Avenue	AM	11/04/10	9.6	A
		Midday	11/04/10	8.9	A
		PM	11/04/10	8.8	A

Existing Link Level of Service

Roadway links were analyzed using volume to capacity (V/C) ratios. The traffic volumes were measured in the field using recent traffic counts. The results of this analysis are summarized on Table 5. Under existing conditions, all of the study segments on California Avenue operate at Level of Service A during the weekday AM, midday, and PM peak hours.

Table 5
Existing Roadway Segment Level of Service

Roadway	Segment	Direction	Highest Weekday Count Day	Count Date	Weekday Peak Hour	Volume	# of Lanes	Capacity	V/C Ratio	LOS
California Av	El Camino Real to Ash Street	EB	Friday	11/5/2010	AM	140	2	1,360	0.10	A
					Midday	242	2	1,360	0.18	A
					PM	190	2	1,360	0.14	A
		WB	Friday	11/5/2010	AM	200	2	1,360	0.15	A
					Midday	230	2	1,360	0.17	A
					PM	233	2	1,360	0.17	A
California Av	Ash Street to Birch Street	EB	Friday	11/5/2010	AM	84	2	1,360	0.06	A
					Midday	181	2	1,360	0.13	A
					PM	141	2	1,360	0.10	A
		WB	Friday	11/5/2010	AM	176	2	1,360	0.13	A
					Midday	244	2	1,360	0.18	A
					PM	221	2	1,360	0.16	A
California Av	Birch Street to Park Avenue (W)	EB	Friday	11/5/2010	AM	65	2	1,360	0.05	A
					Midday	127	2	1,360	0.09	A
					PM	117	2	1,360	0.09	A
		WB	Friday	11/5/2010	AM	113	2	1,360	0.08	A
					Midday	152	2	1,360	0.11	A
					PM	136	2	1,360	0.10	A
California Av	Park Avenue (W) to Park Avenue (E)	EB	Friday	11/5/2010	AM	51	2	1,360	0.04	A
					Midday	82	2	1,360	0.06	A
					PM	69	2	1,360	0.05	A
		WB	Friday	11/5/2010	AM	97	2	1,360	0.07	A
					Midday	170	2	1,360	0.13	A
					PM	196	2	1,360	0.14	A

Existing Queuing

Queue lengths were calculated for each of the study intersections to check whether any excessive queues are occurring under existing conditions (see Table 6). At all of the STOP controlled intersections the 95th percentile queue lengths are shown to be four cars at the most (two cars per lane, 50 feet per lane). Queues are longest at the El Camino Real intersection. The 95th percentile queues on westbound California Avenue are shown to be up to 8 cars. The longest queues are for the through lane in the AM peak hour, the left turn lane for the mid-day peak hour, and the right turn for the PM peak hour. The right turn lane is of insufficient length to accommodate 8 cars. Therefore, some right turn cars queue in the through lane.

Table 6
Existing Queues on California Avenue

Measurement	El Camino / California WBL	El Camino / California WBT	El Camino / California WBR	Ash / California EBT ³	Ash / California WBT ³	Birch / California EBT ³	Birch / California WBT ³	Park (W) / California EBT ³	Park (W) / California WBT ³	Park (E) / California EBL	Park (E) / California EBT	Park (E) / California WBT ³
AM Peak Hour												
Cycle/Delay ¹ (sec)	150	150	150	7.9	8.3	9.4	9.4	8.0	8.8	8.0	7.4	7.2
Volume (vphpl)	46	104	85	70	112	54	79	61	68	24	19	28
Avg. Queue (veh./ln.)	1.9	4.3	3.5	0.2	0.3	0.1	0.2	0.1	0.2	0.1	0.0	0.1
Avg. Queue ² (ft./ln)	48	108	89	4	6	4	5	3	4	1	1	1
95th % Queue (veh./ln.)	4	8	7	1	1	1	1	1	1	1	0	1
95th % Queue (ft./ln)	100	200	175	25	25	25	25	25	25	25	0	25
Storage (ft./ ln.)	550	550	75	550	300	285	350	350	150	150	150	250
Adequate (Y/N)	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Midday Peak Hour												
Cycle/Delay ¹ (sec)	120	120	120	9.0	9.4	10.9	9.8	8.5	9.3	8.2	7.6	7.3
Volume (vphpl)	133	52	103	149	161	139	66	112	91	26	24	32
Avg. Queue (veh./ln.)	4.4	1.7	3.4	0.4	0.4	0.4	0.2	0.3	0.2	0.1	0.1	0.1
Avg. Queue ² (ft./ln)	111	43	86	9	11	11	4	7	6	1	1	2
95th % Queue (veh./ln.)	8	4	7	2	2	2	1	1	1	1	0	1
95th % Queue (ft./ln)	200	100	175	50	50	50	25	25	25	25	0	25
Storage (ft./ ln.)	550	550	75	550	300	285	350	350	150	150	150	250
Adequate (Y/N)	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
PM Peak Hour												
Cycle/Delay ¹ (sec)	135	135	135	8.3	8.6	9.5	9.1	8.1	9.5	8.2	7.8	7.5
Volume (vphpl)	97	38	109	113	130	69	58	84	100	17	34	36
Avg. Queue (veh./ln.)	3.6	1.4	4.1	0.3	0.3	0.2	0.1	0.2	0.3	0.0	0.1	0.1
Avg. Queue ² (ft./ln)	91	36	102	7	8	5	4	5	7	1	2	2
95th % Queue (veh./ln.)	7	4	8	1	1	1	1	1	1	0	1	1
95th % Queue (ft./ln)	175	100	200	25	25	25	25	25	25	0	25	25
Storage (ft./ ln.)	550	550	75	550	300	285	350	350	150	150	150	250
Adequate (Y/N)	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y

¹ Vehicle queue calculations based on cycle length for signalized intersections and movement delay for unsignalized intersections.
² Assumes 25 Feet Per Vehicle Queued.
³ Volumes include through movement plus right and/or left turns, if lane is shared.



Observed Existing Traffic Conditions

Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to intersection level of service, and (2) to identify any locations where the level of service calculation does not accurately reflect level of service in the field. Overall, the study intersections operate well during the weekday AM, midday, and PM peak hours. Vehicles were able to clear the signal on each cycle. Speeds on California Avenue are slow because of cars hunting for parking spaces and because of numerous pedestrians crossing the street, both in the crosswalks and between crosswalks. Also, there are many bicycles using California Avenue to access the Caltrain station.





3. Project Conditions

This chapter describes project traffic conditions, level of service results, and project recommendations. Included are descriptions of the proposed project, identification of the impacts, and descriptions of the mitigation measures.



Proposed Project Description

The proposed project would reduce the number of travel lanes on California Avenue between El Camino Real and Park Boulevard from four travel lanes to two. The additional pavement space provided from the lane reduction would be used for streetscape improvements including decorative pavement bands, intersection bulb-outs, and to provide additional on-street parking supply. Most of the parking spaces would be 60-degree angled parking spaces, although some parallel parking will also be provided. At higher volume intersections such as El Camino Real & California Avenue and Birch Street & California Avenue, additional approach lanes are proposed to provide additional intersection capacity for traffic. All existing crosswalks for pedestrians would be maintained with three additional crosswalks provided at the intersections of Park Boulevard & California Avenue. Where bulb-out improvements are proposed, existing crosswalk lengths would be reduced to improve pedestrian operations. The project would also enhance the existing California Avenue Bike Route with the addition of Sharrows stenciled onto the pavement. The proposed project plan is shown on Figures 8 & 9.



Traffic Volumes

For this analysis, the traffic volumes were assumed to be unchanged from those of existing conditions. According to the City of Palo Alto, there are no pending projects or planned projects in the foreseeable future. Therefore, traffic volumes on California Avenue between El Camino Real and Park Boulevard will remain unchanged with the current land uses. The reduction in capacity on California Avenue that would occur when narrowing from four lanes to two lanes is not expected to displace any vehicles to parallel streets. As described below, even with the narrowing, traffic delays and queues would be well within acceptable standards.



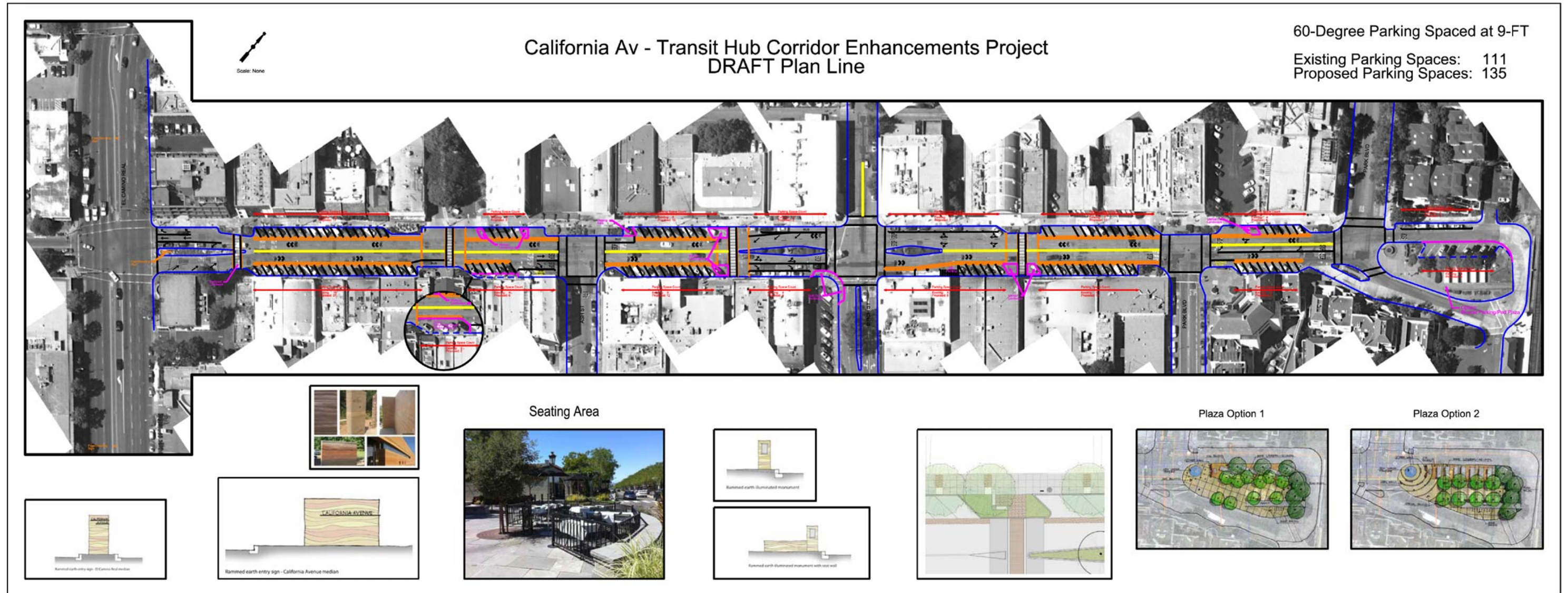
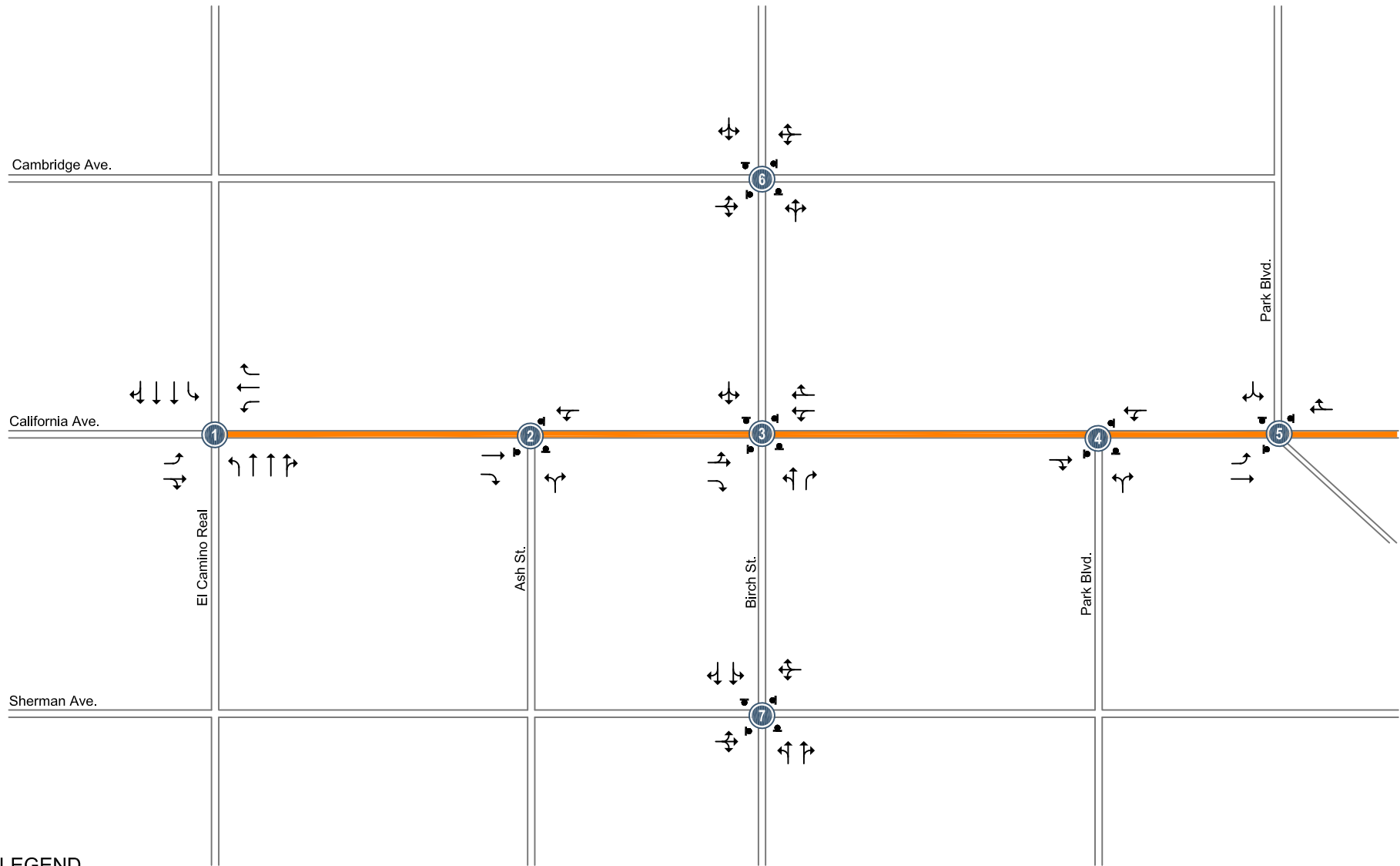



Figure 8
Proposed California Avenue Improvements



LEGEND

 = Study Segment / Project Area


 = Study Intersection

Figure 9
Project Intersection Lane Configurations

Intersection Level of Service

The results of the intersection level of service analysis under project conditions are summarized in Table 7. The results indicate that, with the proposed reduction in travel lanes, all of the study intersections would continue to operate at acceptable levels of service with LOS C or better. The stop sign intersections would operate at LOS A or B. While some intersection delays would increase slightly, each of the study intersections would continue to operate well within capacity. Thus, the proposed project would not result in any adverse LOS impacts to intersections on California Avenue. The level of service calculation sheets are included in Appendix B.

**Table 7
Project Intersection Level of Service**

Study Number	Intersection	Peak Hour	Existing		Project			
			Ave. Delay	LOS	Ave. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	El Camino Real and California Avenue	AM	24.7	C	24.7	C	0.0	0.000
		Midday	28.8	C	28.8	C	0.0	0.000
		PM	30.5	C	30.5	C	0.0	0.000
2	Ash Street and California Avenue	AM	8.2	A	8.5	A	0.4	0.121
		Midday	9.1	A	9.9	A	0.8	0.187
		PM	8.4	A	8.9	A	0.5	0.142
3	Birch Street and California Avenue	AM	11.1	B	11.2	B	0.0	0.000
		Midday	10.9	B	11.3	B	0.3	0.002
		PM	9.8	A	9.9	A	0.1	0.001
4	Park Boulevard (W) and California Avenue	AM	8.2	A	8.2	A	0.0	0.000
		Midday	8.4	A	8.6	A	0.1	0.084
		PM	8.4	A	8.4	A	0.0	0.040
5	Park Boulevard (E) and California Avenue	AM	7.2	A	7.2	A	0.0	0.000
		Midday	7.3	A	7.3	A	0.0	0.000
		PM	7.4	A	7.4	A	0.0	0.000
6	Birch Street and Cambridge Avenue	AM	8.2	A	8.2	A	0.0	0.000
		Midday	8.3	A	8.3	A	0.0	0.000
		PM	8.3	A	8.3	A	0.0	0.000
7	Birch Street and Sherman Avenue	AM	9.6	A	9.6	A	0.0	0.000
		Midday	8.9	A	8.9	A	0.0	0.000
		PM	8.8	A	8.8	A	0.0	0.000

Roadway Segment Level of Service

Roadway links were analyzed using volume to capacity (V/C) ratios. With the proposed lane reduction, the volume of traffic on California Avenue would remain unchanged, but the capacity of each direction would be reduced from 1,360 vehicles per hour to 560 vehicles per hour. According to the publication *Parking* by Weant and Levinson, lane groups with 2 lanes experience a 15% reduction in capacity when on-street parking is provided and parking turnover is heavy (approximately 40 parking maneuvers per hour). For one lane streets, on-street parking, and heavy parking turnover, a 30% decrease in capacity is expected. The additional reduction in capacity occurs for one lane roadways because vehicles backing out of spaces block the entire traveled way. With the two lane configuration, through traffic can maneuver around vehicles backing out of spaces.

The results of the volume to capacity analysis are summarized in Table 8. After conversion from four lanes to two lanes, all of the study segments on California Avenue would operate at Level of Service A or B during the weekday AM, midday, and PM peak hours, despite the reduction in capacity. Thus, according to the City of Palo Alto level of service standards, the proposed lane reduction would not result in any adverse LOS impacts to California Avenue.

**Table 8
Roadway Segment LOS with California Avenue Lane Reduction**

Segment	Direction	Highest Weekday Count Day	Count Date	Weekday Peak Hour	Volume	Existing				Project			
						# of Lanes	Capacity	V/C Ratio	LOS	# of Lanes	Capacity	V/C Ratio	LOS
El Camino Real to Ash Street	EB	Friday	11/5/2010	AM	140	2	1,360	0.10	A	1	560	0.25	A
				Midday	242	2	1,360	0.18	A	1	560	0.43	B
				PM	190	2	1,360	0.14	A	1	560	0.34	B
	WB	Friday	11/5/2010	AM	200	2	1,360	0.15	A	1	560	0.36	B
				Midday	230	2	1,360	0.17	A	1	560	0.41	B
				PM	233	2	1,360	0.17	A	1	560	0.42	B
Ash Street to Birch Street	EB	Friday	11/5/2010	AM	84	2	1,360	0.06	A	1	560	0.15	A
				Midday	181	2	1,360	0.13	A	1	560	0.32	B
				PM	141	2	1,360	0.10	A	1	560	0.25	A
	WB	Friday	11/5/2010	AM	176	2	1,360	0.13	A	1	560	0.31	B
				Midday	244	2	1,360	0.18	A	1	560	0.44	B
				PM	221	2	1,360	0.16	A	1	560	0.39	B
Birch Street to Park Avenue (W)	EB	Friday	11/5/2010	AM	65	2	1,360	0.05	A	1	560	0.12	A
				Midday	127	2	1,360	0.09	A	1	560	0.23	A
				PM	117	2	1,360	0.09	A	1	560	0.21	A
	WB	Friday	11/5/2010	AM	113	2	1,360	0.08	A	1	560	0.20	A
				Midday	152	2	1,360	0.11	A	1	560	0.27	B
				PM	136	2	1,360	0.10	A	1	560	0.24	A
Park Avenue (W) to Park Avenue (E)	EB	Friday	11/5/2010	AM	51	2	1,360	0.04	A	1	560	0.09	A
				Midday	82	2	1,360	0.06	A	1	560	0.15	A
				PM	69	2	1,360	0.05	A	1	560	0.12	A
	WB	Friday	11/5/2010	AM	97	2	1,360	0.07	A	1	560	0.17	A
				Midday	170	2	1,360	0.13	A	1	560	0.30	B
				PM	196	2	1,360	0.14	A	1	560	0.35	B

Traffic Diversion

With any change to the roadway network there is the potential for traffic diversion. Traffic diversion normally occurs when a proposed roadway network change would significantly alter the vehicle delays in a corridor. As previously described, all of the intersections and roadway segments on California Avenue, east of El Camino Road, would operate at LOS A or B with or without the proposed lane reduction. Thus, there would remain plenty of capacity for vehicular traffic on California Avenue even with the lane reduction. For this reason, no measurable traffic diversion to other streets is anticipated.

It should be noted that the existing volumes on the adjacent streets parallel to California Avenue, Cambridge Avenue and Sherman Avenue, are lower than California Avenue. Since these volumes are low, even with the proposed lane reduction, the intersections of Birch Street & Cambridge Avenue and Birch Street & Sherman Avenue would operate at LOS A for all peak periods.

Intersection Queuing

A vehicle queuing analysis was conducted for the movements affected by the lane reduction on California Avenue. Vehicle queues were estimated using a Poisson probability distribution. The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future storage requirements at intersections.

The vehicle queuing estimates and a tabulated summary of the findings are provided in Tables 9, 10, and 11. The analysis indicates that, at all of the unsignalized study intersections with the proposed lane reduction, the estimated 95th percentile vehicle queues for the eastbound and westbound movements on California Avenue would be 2 or 3 vehicles or less. These queues easily could be accommodated in the queuing space provided and would not significantly interfere with parking maneuvers on California Avenue.

The proposed lane reduction would transition from one westbound lane to three lanes (one left, one through, and one right) approximately 100 feet before intersection of El Camino Real and California Avenue. Under existing conditions, this area transitions from two westbound lanes to three lanes. According to the queuing analysis, with the proposed lane reduction, the westbound 95th percentile queues would extend 200 feet from the subject intersection for the following movements:

- westbound through movement – AM peak hour
- westbound left turn movement – Midday peak hour
- westbound right turn movement – PM peak hour

During these periods, the 95th percentile queues for the other movements at the subject approach would be 100 feet or more. Thus, under the proposed configuration, queues up to 200 feet could occur potentially blocking access to adjacent parking stalls and result in less efficient use of green time at the El Camino Real/California Avenue intersection.

The project consultant explored the use of split phase at the intersection to reduce the vehicles queues and determine whether better signal efficiency could be achieved using shared lanes. Due to the heavy pedestrian crossing volume at the intersection, the level of service calculations showed worse efficiency with split phase operation during all peak hours. For this reason, it is recommended that the existing signal phasing and lane geometry be maintained.

Recommendation: At California Avenue the existing two-lane to three-lane westbound approach to the El Camino Real intersection may be maintained to help provide adequate storage capacity for at least 200 feet from the intersection. This would result in the loss of the 5 new on-street parking spaces along the north side of California Avenue but still allows for the maintenance of the existing 12 on-street parking spaces in the segment providing for no overall parking loss. See Figure 10 for a diagram of the extended queues and modified parking spaces.

Table 9
Queuing Analysis – AM Peak Hour

Measurement	El Camino / California WBL	El Camino / California WBT	El Camino / California WBR	Ash / California EBT ³	Ash / California WBT ³	Birch / California EBT ³	Birch / California WBT ³	Park (W) / California EBT ³	Park (W) / California WBT ³	Park (E) / California EBL	Park (E) / California EBT	Park (E) / California WBT ³
Existing												
Cycle/Delay ¹ (sec)	150	150	150	7.9	8.3	9.4	9.4	8.0	8.8	8.0	7.4	7.2
Volume (vphpl)	46	104	85	70	112	54	79	61	68	24	19	28
Avg. Queue (veh./ln.)	1.9	4.3	3.5	0.2	0.3	0.1	0.2	0.1	0.2	0.1	0.0	0.1
Avg. Queue ² (ft./ln)	48	108	89	4	6	4	5	3	4	1	1	1
95th % Queue (veh./ln.)	4	8	7	1	1	1	1	1	1	1	0	1
95th % Queue (ft./ln)	100	200	175	25	25	25	25	25	25	25	0	25
Storage (ft./ ln.)	550	550	75	550	300	285	350	350	150	150	150	250
Adequate (Y/N)	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Project												
Cycle/Delay ¹ (sec)	150	150	150	8.4	8.9	9.7	9.4	7.7	8.3	8.0	7.4	7.2
Volume (vphpl)	46	104	85	112	224	83	79	121	135	24	19	28
Avg. Queue (veh./ln.)	1.9	4.3	3.5	0.3	0.6	0.2	0.2	0.3	0.3	0.1	0.0	0.1
Avg. Queue ² (ft./ln)	48	108	89	7	14	6	5	6	8	1	1	1
95th % Queue (veh./ln.)	4	8	7	1	2	1	1	1	1	1	0	1
95th % Queue (ft./ln)	100	200	175	25	50	25	25	25	25	25	0	25
Storage (ft./ ln.)	100	550	75	550	300	285	350	350	150	150	150	250
Adequate (Y/N)	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
¹ Vehicle queue calculations based on cycle length for signalized intersections and movement delay for unsignalized intersections. ² Assumes 25 Feet Per Vehicle Queued. ³ Volumes include through movement plus right and/or left turns if lane is shared.												

Table 10
Queuing Analysis – Midday Peak Hour

Measurement	El Camino / California WBL	El Camino / California WBT	El Camino / California WBR	Ash / California EBT ³	Ash / California WBT ³	Birch / California EBT ³	Birch / California WBT ³	Park (W) / California EBT ³	Park (W) / California WBT ³	Park (E) / California EBL	Park (E) / California EBT	Park (E) / California WBT ³
Existing												
Cycle/Delay ¹ (sec)	120	120	120	9.0	9.4	10.9	9.8	8.5	9.3	8.2	7.6	7.3
Volume (vphpl)	133	52	103	149	161	139	66	112	91	26	24	32
Avg. Queue (veh./ln.)	4.4	1.7	3.4	0.4	0.4	0.4	0.2	0.3	0.2	0.1	0.1	0.1
Avg. Queue ² (ft./ln.)	111	43	86	9	11	11	4	7	6	1	1	2
95th % Queue (veh./ln.)	8	4	7	2	2	2	1	1	1	1	0	1
95th % Queue (ft./ln.)	200	100	175	50	50	50	25	25	25	25	0	25
Storage (ft./ ln.)	550	550	75	550	300	285	350	350	150	150	150	250
Adequate (Y/N)	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Project												
Cycle/Delay ¹ (sec)	120	120	120	9.8	9.4	12.2	9.8	8.5	8.8	8.2	7.6	7.3
Volume (vphpl)	133	52	103	205	321	208	66	223	181	26	24	32
Avg. Queue (veh./ln.)	4.4	1.7	3.4	0.6	0.8	0.7	0.2	0.5	0.4	0.1	0.1	0.1
Avg. Queue ² (ft./ln.)	111	43	86	14	21	18	4	13	11	1	1	2
95th % Queue (veh./ln.)	8	4	7	2	3	2	1	2	2	1	0	1
95th % Queue (ft./ln.)	200	100	175	50	75	50	25	50	50	25	0	25
Storage (ft./ ln.)	100	550	75	550	300	285	350	350	150	150	150	250
Adequate (Y/N)	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
¹ Vehicle queue calculations based on cycle length for signalized intersections and movement delay for unsignalized intersections. ² Assumes 25 Feet Per Vehicle Queued. ³ Volumes include through movement plus right and/or left turns if lane is shared.												

Table 11
Queuing Analysis – PM Peak Hour

Measurement	El Camino / California WBL	El Camino / California WBT	El Camino / California WBR	Ash / California EBT ³	Ash / California WBT ³	Birch / California EBT ³	Birch / California WBT ³	Park (W) / California EBT ³	Park (W) / California WBT ³	Park (E) / California EBL	Park (E) / California EBT	Park (E) / California WBT ³
Existing												
Cycle/Delay ¹ (sec)	135	135	135	8.3	8.6	9.5	9.1	8.1	9.5	8.2	7.8	7.5
Volume (vphpl)	97	38	109	113	130	69	58	84	100	17	34	36
Avg. Queue (veh./ln.)	3.6	1.4	4.1	0.3	0.3	0.2	0.1	0.2	0.3	0.0	0.1	0.1
Avg. Queue ² (ft./ln)	91	36	102	7	8	5	4	5	7	1	2	2
95th % Queue (veh./ln.)	7	4	8	1	1	1	1	1	1	0	1	1
95th % Queue (ft./ln)	175	100	200	25	25	25	25	25	25	0	25	25
Storage (ft./ ln.)	550	550	75	550	300	285	350	350	150	150	150	250
Adequate (Y/N)	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Project												
Cycle/Delay ¹ (sec)	135	135	135	8.8	9.4	10.0	9.1	7.9	8.9	8.2	7.8	7.5
Volume (vphpl)	97	38	109	160	260	117	58	168	200	17	34	36
Avg. Queue (veh./ln.)	3.6	1.4	4.1	0.4	0.7	0.3	0.1	0.4	0.5	0.0	0.1	0.1
Avg. Queue ² (ft./ln)	91	36	102	10	17	8	4	9	12	1	2	2
95th % Queue (veh./ln.)	7	4	8	2	2	1	1	2	2	0	1	1
95th % Queue (ft./ln)	175	100	200	50	50	25	25	50	50	0	25	25
Storage (ft./ ln.)	100	550	75	550	300	285	350	350	150	150	150	250
Adequate (Y/N)	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
¹ Vehicle queue calculations based on cycle length for signalized intersections and movement delay for unsignalized intersections. ² Assumes 25 Feet Per Vehicle Queued. ³ Volumes include through movement plus right and/or left turns if lane is shared.												



Figure 10
Alternate Extended Queue Storage Design at El Camino Real



Two Lane to One Lane Transitions

There are two locations where the proposed lane reduction would transition two lanes to one lane. The *2010 California Manual on Uniform Traffic Control Devices* states that the transition length for roads with a design speed of less than 45 mph is computed by the following formula: $L=WS^2/60$, where L is the transition length, S is the speed limit in MPH, and W is the offset distance. Thus, to transition 12 feet with a speed limit of 25 mph would require a taper of 125 feet.



The first transition location is located westbound on California Avenue just west of Birch Street. This transition would move two lanes into one lane over approximately 125 feet. To eliminate the need for lane merging along California Avenue, the westbound curb lane may be converted to a dedicated right turn only lane to northbound Birch Street. This configuration would add less than 1 second of average delay to the intersection during the worst peak hour, and the intersection still would operate at LOS B. See Figure 11 for a diagram of the alternate westbound geometry and transition to one lane.



The second merge location is on eastbound California Avenue just east of the El Camino Real/California Avenue intersection. This segment transitions two lanes to one lane over approximately 100 feet. Only one receiving lane is required because at any given time only one lane from either the west side of El Camino Real, the southbound left turn approach of El Camino Real, or the northbound right turn approach of El Camino Real feed traffic onto California Avenue. The existing curb lane approaching the first mid-block crosswalk of the project area may be removed to eliminate the need for lane merging. The curb lane can be converted to a bus duckout for the existing Stanford Marguerite shuttle stop at the intersection. This design would eliminate a stopped bus from blocking through traffic and help to avoid operations impacts to the El Camino Real & California Avenue intersection. See Figure 10 for an alternate design for the eastbound receiving lanes.



Impacts to Pedestrians, Bikes, & Transit

The project would maintain all existing crosswalks and sidewalks. In addition, three new crosswalks would be provided at the intersections of Park Boulevard and California Avenue (east and west). Overall, pedestrian mobility would be maintained or improved. Prior to final design, the new crosswalk locations should be reviewed to ensure that wheelchair ramps could be installed in accordance with Americans with Disabilities Act requirements.



The project would make California Avenue east of El Camino Real into an enhanced bike route, with Sharrows, to provide a continuous bicycle connection to the Caltrain Station and to the Park Boulevard bike lanes. Generally, motor vehicle speeds would remain as is or could be reduced slightly because fewer travel lanes would eliminate the ability of faster drivers to pass slower drivers. Thus, conditions for bikes would be improved under the proposed plan.



The project does not propose any changes to existing Caltrain or bus facilities. All existing bus stops would be maintained. The proposed lane reduction would result in small increases in travel time in the corridor due to the increased parking supply on California Avenue and fewer travel lanes. However, the increased delays would be on the order of two or three seconds and would not significantly adversely impact bus operations.



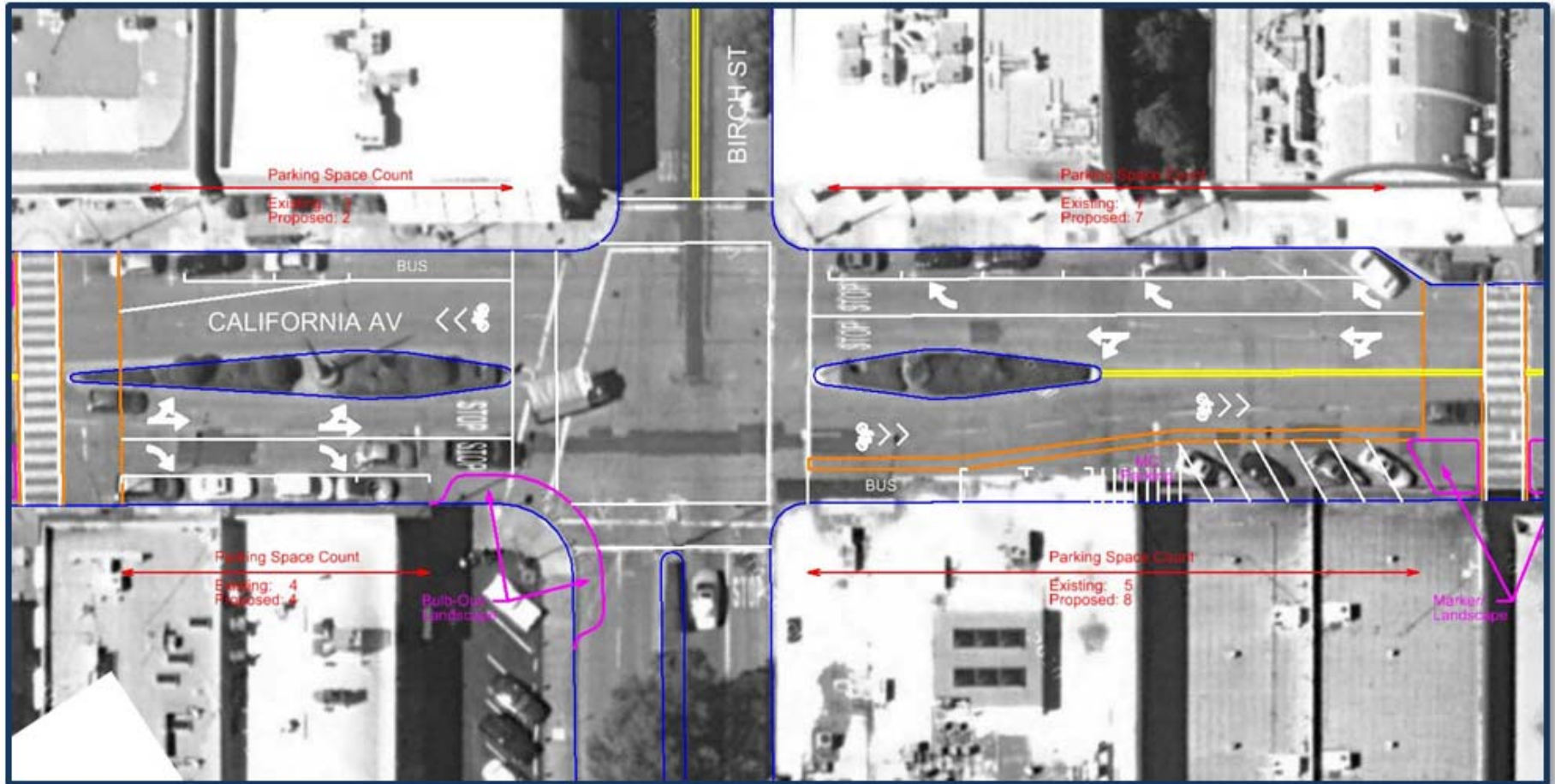


Figure 11
Alternate Westbound Lane Configuration at Birch Street



Geometric Considerations

As previously described, the project would add 60 degree angled parking along the study segments of California Avenue. City of Palo Alto standards for angled parking require 16-foot drive aisle widths adjacent to 9 foot wide parking stalls to allow vehicles to back out of spaces without encroaching on the opposite direction travel lane. For most of the study segment, the project would provide 18 to 19 foot street widths adjacent to 60 degree angled parking, which would comply with City standards. However, three locations would provide less back up space than recommended by City standards. On the south side of California Avenue, just west of Ash Street, the back up distance shown on the current plan would be 14.5 feet. On the north and south sides of California Avenue, between the Park Boulevard intersections, the back up distance would be 13.5 feet.



While the City standard would not be met in these areas, the publication *The Dimensions of Parking, Fourth Edition* by the Urban Land Institute (Table 8-4) shows that a minimum street width of 14.5 feet is acceptable adjacent to 60 degree angled parking. The City may wish to review the proposed plan to determine whether the existing street width in these areas could be increased by slightly relocating double yellow lines or changing the parking angle to 45-degrees. Potential alternate designs are discussed below:



- For the proposed four angled parking spaces in the same location of the proposed Optional Outside Seating/Community Stage area on the south side of California Avenue between Ash Street and the mid-block crosswalk immediately west of Ash Street, changing these parking spaces from 60-degrees to 45-degrees does not result in a loss of proposed on-street parking spaces within this street segment.
- For the proposed six angled parking spaces along the north side of California Avenue between Park Boulevard and the driveway entrance to the Molly Stone market, changing these parking spaces from 60-degrees to 45-degrees results in the loss of one new parking space providing five spaces instead. This is still one space more than the existing four parking spaces under existing conditions.
- For the proposed eight angled parking spaces along the south side of California Avenue between Park Boulevard (East) and Park Boulevard (West), changing these parking spaces from 60-degrees to 45-degrees results in the loss of two new parking spaces providing six spaces instead. This is still one space more than the existing five parking spaces under existing conditions.



See Figure 12 for a diagram of potential changes to the proposed parking between the Park Boulevard intersections. Note that with the recommended angle changes to the parking, the total number of proposed parking spaces on the study segment would be 124 spaces with 13 net new spaces.



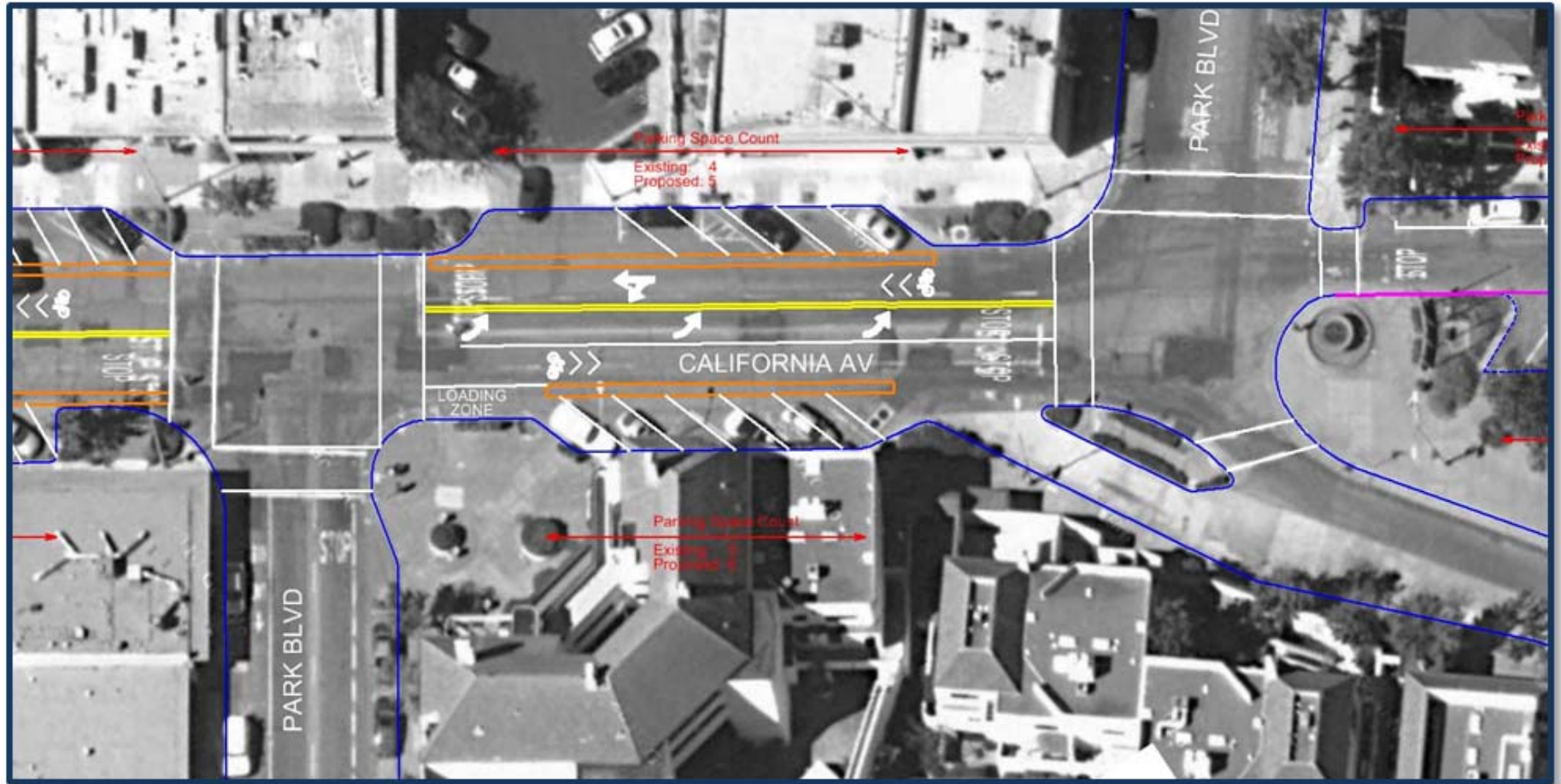


Figure 12
Alternate 45-Degree Parking Design between the Park Boulevard Intersections



4. Conclusion

The proposed lane reduction was reviewed in accordance with City of Palo Alto and Valley Transportation Authority (VTA) – Congestion Management Program (CMP) guidelines. According to the City of Palo Alto, there are no pending projects or planned projects in the foreseeable future. Therefore, traffic volumes on California Avenue between El Camino Real and Park Boulevard will remain unchanged with the current land uses. An analysis of intersection Level of Service (LOS), street segment LOS, and intersection queuing was conducted to determine whether the project would result in any significant adverse impacts under project conditions with the lane reduction. Based on this analysis, the proposed lane reduction would not result in any adverse significant LOS impacts to intersections or roadway segments, both of which would continue to operate well within capacity (LOS A or B). Because sufficient capacity would be maintained on California Avenue, no traffic diversion is expected to occur with the proposed lane reduction. The project would enhance pedestrian circulation with added crosswalks and enhance bicycle safety with Sharrows painted on the pavement. The project would not change existing bus stops, so there would not be any impact to transit service.

The study recommends the following enhancements to the design:

- At California Avenue the existing two-lane to three-lane westbound approach to the El Camino Real intersection may be maintained to help provide adequate storage capacity for at least 200 feet from the intersection. This would result in the loss of the 5 new on-street parking spaces along the north side of California Avenue but still allows for the maintenance of the existing 12 on-street parking spaces in the segment providing for no overall parking loss.
- The proposed crosswalk additions at the intersections of California Avenue & Park Boulevard should be reviewed to ensure that wheelchair ramps can be installed in accordance with American Disabilities Act requirements.
- The City's proposed California Avenue plan line concept proposes to maintain the existing two-lane westbound approach at Birch Street. Two lanes are also proposed for maintenance immediately west of Birch Street approaching the mid-block crosswalk west of the Birch Street intersection. To eliminate the need for lane merging along California Avenue, the





westbound curb lane may be converted to a dedicated right turn only lane to northbound Birch Street.



- The City's proposed California Avenue plan line concept also proposed to maintain the existing two receiving lanes for eastbound California Avenue at El Camino Real. Only one receiving lane is required because at any given time only one lane from either the west side of El Camino Real, the southbound left turn approach of El Camino Real, or the northbound right turn approach of El Camino Real feed traffic onto California Avenue. The existing curb lane approaching the first mid-block crosswalk of the project area may be removed to eliminate the need for lane merging. The curb lane can be converted to a bus duckout for the existing Stanford Marguerite shuttle stop at the intersection. This design would eliminate a stopped bus from blocking through traffic and help to avoid operations impacts to the El Camino Real & California Avenue intersection.



- Three proposed on-street parking segments on California Avenue do not meet the City's existing parking standards providing adjacent lane widths that are too narrow for vehicles to back out of angled parking spaces. To comply with the City's parking standards these segments could be reconfigured to 45-degree parking stalls. The three parking segments are as follows:



- The proposed four angled parking spaces in the same location of the proposed Optional Outside Seating/Community Stage area on the south side of California Avenue between Ash Street and the mid-block crosswalk immediately west of Ash Street. Changing these parking spaces from 60-degrees to 45-degrees does not result in a loss of proposed on-street parking spaces within this street segment.
- The proposed six angled parking spaces along the north side of California Avenue between Park Boulevard and the driveway entrance to the Molly Stone market. Changing these parking spaces from 60-degrees to 45-degrees results in the loss of one new parking space providing five spaces instead. This is still one space more than the existing four parking spaces under existing conditions.
- The proposed eight angled parking spaces along the south side of California Avenue between Park Boulevard (East) and Park Boulevard (West). Changing these parking spaces from 60-degrees to 45-degrees results in the loss of two new parking spaces providing six spaces instead. This is still one space more than the existing five parking spaces under existing conditions.





PLANNING & TRANSPORTATION DIVISION

STAFF REPORT

TO: PLANNING & TRANSPORTATION COMMISSION

FROM: Jaime O. Rodriguez
Chief Transportation Official

DEPARTMENT: Planning & Community Environment

DATE: January 12, 2011

SUBJECT: Recommendations to the City Council regarding 1) a Negative Declaration for the California Avenue Streetscape Project, including a proposed 4-lane to 2-lane reduction between El Camino Real and the California Avenue Caltrain Station, and 2) a Capital Improvements Program for the project.

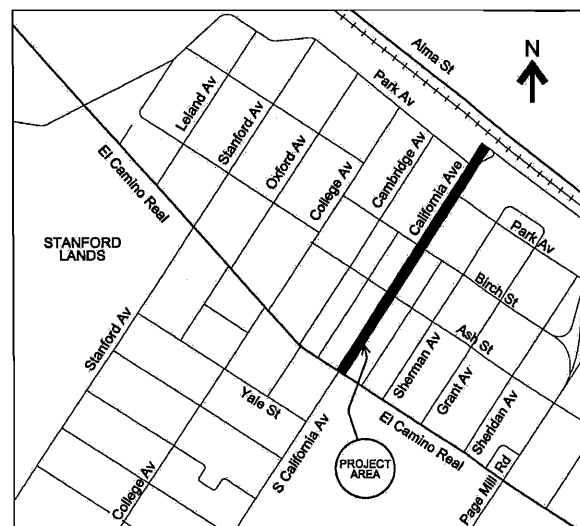
RECOMMENDATION

Staff recommends that the Planning and Transportation Commission (PTC) recommend to the City Council:

- 1) Approval of the proposed Negative Declaration for the California Avenue Streetscape Project, and
- 2) A Capital Improvements Program (CIP) to fund the project improvements.

BACKGROUND

In October 2010, the City submitted an application to the Valley Transportation Authority (VTA) for Community Design for Transportation (CDT) Program funding for the California Avenue Transit Hub Project. The proposed project provides for streetscape improvements along California Avenue between El Camino Real and the California Avenue Caltrain Station, including place making, traffic calming and other streetscape improvements. The City Council authorized the filing of the grant request on December 6, 2010. The VTA approved the grant application for project funding in the amount of \$1,175,200 on December 9, 2010.



Over the months of August and September before the submittal of the grant application, City staff solicited community input through an extensive community outreach process conducting five community meetings with California Avenue merchants, the general public and the Palo Alto Central Board. During the community outreach process, the community's main concern was the proposed 4-lane to 2-lane reduction. In December, after completion of a traffic analysis for the project, a sixth meeting was held with the community to discuss the results of the analysis.

DISCUSSION

The California Avenue Transit Hub Corridor Project streetscape improvements include: community identity markers; traffic calming treatment including intersection and mid-block pedestrian crossing bulb-outs and a 4-lane to 2-lane roadway reduction; roadway chicanes that provide for additional tree planting or public art elements; streetscape elements including street furniture such as park benches, newspaper racks, and enhanced bicycle parking; and improvements to the Park Blvd Plaza. These improvements enhance the connection between existing residential and commercial land uses to the transit facilities at each of California Avenue, with Caltrain on the eastern end and VTA transit facilities on the western end.

Project Purpose

In keeping with the vision of the Comprehensive Plan, the purpose of the California Avenue Streetscape Project is to develop a "complete" roadway that best utilizes the available right-of-way of the street to:

- Provide safe space for pedestrians and bicyclists along and crossing the street;
- Maintain adequate vehicle movements while slowing cars and trucks to enhance safety;
- Enhance the overall appearance of the street and adjacent non-vehicular spaces with trees and landscaping, artwork, tables and chairs for outside dining, benches, kiosks, signage, and bicycle racks;
- Accommodate parking needs; and
- Facilitate the use of the plaza near the train station for amenities such as the fountain, landscaping, pedestrian access, seating areas, and bicycle racks.

California Avenue has historically been a four-lane street. It originally provided access to Alma Street but is now disconnected from Alma Street by the Caltrain tracks and is not likely to ever be reconnected. As a result, it accommodates a very low level of vehicular traffic (see analysis below). The lane reduction improves the pedestrian/bicyclist experience along the street and the connection between the existing land uses and the enhanced streetscape elements; two-lane streets frequently serve as central business district streets and provide more effective use of the public right-of-way while enhancing the pedestrian and business environment. The lane reduction also allows existing on-street parking to be brought to current parking design standards while expanding the availability of parking on the street.

In order to evaluate whether the 4-lane to 2-lane reduction would have any significant impacts on existing traffic conditions, the City hired a traffic consultant to collect traffic data in November on and along California Avenue and prepare a Traffic Impact Analysis (TIA) to serve as the basis for the evaluation of Transportation and Traffic impacts for the Initial Study prepared for

the California Environmental Quality Act (CEQA) evaluation of the project. The TIA focused on three elements:

- Intersection Level of Service (LOS)
- Roadway Segment LOS by Block Segment, and an
- Independent Roadway Operations Analysis of the city-prepared plan line concept for California Avenue.

Intersection Level of Service Analysis

Intersection LOS is a measurement of “delay” to progress through an intersection based on the intersection control type. For example, intersections with signalized controls such as California Avenue & El Camino Real are measured differently in terms of the amount of acceptable delay compared to intersections with All-Way STOP-controls such as California Avenue & Ash St. Intersection LOS is measured by letter grades on a scale of LOS-A to LOS-F, with LOS-A representing little to no delay by motorists and LOS-F representing unacceptable delays.

The TIA analyzed seven “study intersections” at varying times of day to determine how the proposed 4-lane to 2-lane study would impact intersection operations along California Avenue and adjacent streets. In general, a significant impact occurs when a project causes an intersection or roadway segment to deteriorate below LOS-D. Any significant changes in LOS between existing (4-lane) and project (2-lane) conditions may also serve as an indicator of potential “shifting of traffic” from California Avenue to adjacent streets such as Cambridge Avenue or Sherman Avenue. The Intersection LOS study intersections and their control-type are noted below:

Table 1
Traffic Impact Analysis
Study Intersections

No.	Intersection Name	Control Type
1	California Avenue & El Camino Real	Traffic Signal
2	California Avenue & Ash Street	All-Way Stop
3	California Avenue & Birch Street	All-Way Stop
4	California Avenue & Park Blvd (West)	All-Way Stop
5	California Avenue & Park Blvd (East)	All-Way Stop
6	Cambridge Avenue & Birch Street	All-Way Stop
7	Sherman Avenue & Birch Street	All-Way Stop

The intersection LOS findings, provided in Table 2, show that the 4-lane to 2-lane reduction on California Avenue between El Camino Real and the Park Blvd Plaza do not result in any significant Level of Service impacts to the study intersections. As a result, no anticipated shifting of traffic from California Avenue to adjacent parallel streets such as Cambridge Avenue or Sherman Avenue is expected if the street is restriped to two lanes.

Table 2
California Avenue TIA – Intersection LOS Findings

Intersection Name	Existing Conditions (4-Lanes)						Project Conditions (2-Lanes)					
	LOS			Existing Delay (Sec)			LOS			Delay Increase (Sec)		
	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM
California Ave & El Camino Real	C	C	C	24.7	28.8	30.5	C	C	C	0	0	0
California Ave & Ash St	A	A	A	8.2	9.1	8.4	A	A	A	0.4	0.8	0.5
California Ave & Birch St	B	B	A	11.1	10.9	9.8	B	B	A	0	0.3	0.1
California Ave & Park Blvd (West)	A	A	A	8.2	8.4	8.4	A	A	A	0	.04	.08
California Ave & Park Blvd (East)	A	A	A	7.2	7.3	7.4	A	A	A	0	0.1	0
Cambridge Ave & Birch St	A	A	A	8.2	8.3	8.3	A	A	A	0	0	0
Sherman Ave & Birch St	A	A	A	9.6	8.9	8.8	A	A	A	0	0	0

Roadway Segment LOS Analysis

Like the Intersection LOS analysis, the Roadway Segment LOS analysis uses a similar letter grade scale but instead of focusing on delay time it measures volume demand against roadway capacity. A Roadway Segment LOS analysis was conducted for every block segment and in every travel direction along California Avenue to accurately measure the effects of the proposed 4-lane to 2-lane reduction on California Avenue.

The average daily traffic volumes on California Avenue vary between 5,280 vehicles per day near El Camino Real and 2,748 vehicles per day near Park Blvd. For reference purposes, Table 3 below provides a comparison of traffic volumes of California Avenue against that of traffic in downtowns in neighboring cities.

Table 3
Neighboring Agencies - Downtown Traffic Volume Comparison

No.	City	Street	Avg. Daily Traffic Volume
1	Palo Alto	California Avenue	5,280
2	Palo Alto	University Avenue	18,700
3	Menlo Park	Santa Cruz Avenue	15,445
4	Mountain View	Castro Street	14,297
5	Los Gatos	Santa Cruz Avenue	16,000

The roadway capacity of California Avenue under the current 4-lane condition is approximately 1,360 vehicles per hour per direction or 680 vehicles per lane. The TIA measured the existing Roadway Segment LOS of California Avenue under current (4-lane) and project (2-lane) conditions but assumed a conservative 560 vehicles per lane capacity under project conditions to account for vehicles backing into and out of parking stalls. The reduction in capacity helps to account for “side traffic friction” and is an industry practice in the measurement of Roadway Segment LOS.

The Roadway Segment LOS findings are provided in Table 4 and show that the 4-lane to 2-lane reduction on California Avenue between El Camino Real and the Park Blvd Plaza would result in a Less Than Significant impact to the street; each of the roadway segments would operate at LOS B or better. This is expected because even under project conditions (2-lanes), the directional capacity of the roadway is still twice as great as the vehicle demand of the street.

Table 4
California Avenue TIA – Roadway Block Segment LOS Findings

California Avenue Roadway Block Segment	Travel Direction	Ex. Volumes			Roadway Segment LOS (4-lanes)			Roadway Segment LOS (2-lanes)		
		AM	MID	PM	AM	MID	PM	AM	MID	PM
El Camino Real to Ash St	EB	140	242	190	A	A	A	A	B	B
	WB	200	230	233	A	A	A	B	B	B
Ash St to Birch St	EB	84	181	141	A	A	A	A	B	A
	WB	176	244	221	A	A	A	B	B	B
Birch St to Park Blvd (West)	EB	65	127	117	A	A	A	A	A	A
	WB	113	152	136	A	A	A	A	B	A
Park Blvd (West) to Park Blvd (East)	EB	51	82	69	A	A	A	A	A	A
	WB	97	170	196	A	A	A	B	B	A

Operations Analysis

The operations analysis of the TIA was intended to provide an independent review of the concept plan line developed by the City through the various community outreach meetings held before the submittal of the California Avenue – Transit Hub Corridor Improvement Project grant proposal. The operations analysis also included a queuing study of the California Avenue & El Camino Real intersection to determine whether the 4-lane to 2-lane reduction would result in any queue impacts from the signalized intersection at El Camino Real on California Avenue.

The traffic consultant recommends several optional improvements to the City conceptual plan line for California Avenue. All of the recommendations have been included in the proposed plan by the City and if approved by the City Council will be used by a future design consultant for the project specifications.

The operations recommendations are listed below:

1) Maintain 2-Lanes Westbound on California Avenue Approaching El Camino Real

The original city concept plan line maintained the 3-lane westbound approach on California Avenue between El Camino Real and the first mid-block crosswalk located adjacent to Izzy's Brooklyn Bagels shop. During the commute periods, however, the existing queue beyond the crosswalk would double in length under a one lane condition so maintaining the two lane westbound approach for 200-ft beyond the limit line from El Camino Real will help to maintain the existing roadway operations. This results in the loss of five proposed new parking spaces along the north side of California Avenue between El Camino Real and Ash St but retains the existing 12 parking stall count.

2) Reduce Parking Angle from 60-degree to 45-degree Stalls at Select Block Segments

The original city concept plan line recommended 60-degree parking stalls throughout the project corridor to help provide consistency in parking operations and increase the on-street parking count from 111 stalls to 135 stalls, an increase of 24 on-street parking spaces.

The traffic consultant recommends that the parking stalls be reduced to 45-degrees at the following three block segments because the adjacent vehicle travel lane is narrower in these locations to accommodate either widened sidewalks or additional turn lanes in the street:

- North Side of California Av between Park Bl (West) and Park Bl (East)
- South Side of California Av between Park Bl (West) and Park Bl (East)
- South Side of California Av between Ash St and the Mid-Block Crosswalk located in front of Bank of the West

The reconfiguration of parking stalls to 45-degrees at these locations results in the loss of two proposed new parking spaces. The total on-street parking count with these changes increases from 111 stalls to 128 stalls, an increase of 17 on-street parking spaces.

3) Eliminate 2-lane to 1-lane Weaving Locations

During the initial round of community meetings in August and September, the proposed concept plan line was revised several times to try and accommodate community input regarding operations on California Avenue including the protection of intersection configurations, or 2-Through Lane capacity, at locations such as Birch St. This results in the need to merge back to 1-lane beyond the intersection. The Intersection LOS study shows that the reduction from 2-lanes per approach to 1-lane per approach does not impact Intersection LOS so one continuous through lane can be implemented without any impact to the street.

The second merge location occurs immediately east of El Camino Real entering California Avenue. No more than one lane ever feeds into California Avenue from the El Camino Real intersection though so the existing 2-lane configuration can be reduced to 1-lane without any impacts as noted in the Roadway Segment LOS analysis. The Stanford Marguerite shuttle stop will be relocated easterly from its current location adjacent to the Izzy's Brooklyn Bagel Shop to just past the El Camino Real intersection; this will also help to eliminate choke points on the roadway when the shuttle is boarded.

4) Provide ADA-Compliant Handicap Ramps at Park Blvd

The City concept plan line provides three new crosswalks, one at Park Blvd (West) and two at Park Blvd (East). These were also crosswalk locations requested by the community. Hexagon Transportation Consultants recommends that ADA-compliant handicap ramps be provided at all existing and new crosswalk locations. This will be implemented during the design phase of the project.

Cumulative Traffic Analysis

For CEQA, evaluations of existing and project conditions are required to identify any impacts from the project and were completed as part of the TIA. No future or planned trips are currently estimated along California Avenue nor are there any estimated traffic increases on California Avenue in the City's traffic model under the existing land uses.

Mixed use development (residential development above ground floor retail) is currently allowed under the existing zoning along California Avenue and the existing Comprehensive Plan encourages mixed use development in the California Avenue area but it is unlikely that enough development would occur such that the development would result in impacts to traffic operations along California Avenue under a two-lane scenario. For example, at California Avenue & Birch Street during the midday peak approximately 882 vehicles travel through the intersection resulting in an intersection LOS-B condition under two-lanes. Traffic volumes would need to 76% to 1,554 vehicles before a LOS-D condition was met. At California Avenue & Ash Street, approximately 737 vehicles travel through the intersection during the midday providing an intersection LOS-A condition under two-lanes. Traffic volumes at California Avenue & Ash Street would need to more than double to 1,452 before a LOS-D condition was met. No long-term cumulative traffic impacts are there anticipated under a two-lane project condition.

Other Environmental Factors Evaluated

Other environmental factors evaluated during the CEQA Project Check List along with their findings are summarized in Table 6.

Table 6
CEQA Project Check List and Findings Summary

<u>Category</u>	<u>Finding</u>
Aesthetics	Less Than Significant Impact to No Impact
Agricultural & Forest Resources	No Impact
Air Quality	Less Than Significant Impact to No Impact
Biological Resources	No Impact
Cultural Resources	No Impact
Geology, Soils, & Seismicity	No Impact
Greenhouse Gas Emissions	No Impact
Hazards and Hazardous Materials	No Impact
Hydrology and Water Quality	No Impact
Land Use and Planning	No Impact
Mineral Resources	No Impact
Noise	Less Than Significant Impact to No Impact
Population and Housing	No Impact
Public Services	No Impact
Recreation	No Impact
Transportation & Traffic (TIA)	Less Than Significant Impact to No Impact
Utilities and Service Systems	No Impact

Mandatory Findings of Significance Less Than Significant Impact

The conclusion of the Initial Study is that there are no significant impacts associated with the project, including the reduction of four lanes of traffic to two lanes. The PTC's recommendation will be considered by the City Council on February 10, 2010, at which time the Council will also establish a Capital Improvements Program (CIP) for the project. Since the PTC is responsible for conducting an annual review of CIPs affecting the physical development of the city for consistency with the Comp. Plan and potential improvements in economy efficiency, Staff is recommending that the PTC review those factors now, as the CIP is being established.

Design Phase

If the environmental analysis is approved and the funding is provided, the project will proceed into a more detailed design phase in the spring of this year. The design phase will involve multiple community meetings as well as hearings with the ARB, PTC and ultimately the City Council. During the design phase, which is estimated to take approximately 12 months, specifics will be considered for the types and locations of the various amenities (benches, markers, signs, tables, artwork, bicycle racks, newsracks, trash receptacles, etc.) to be placed along the street, as well as the final configuration of the roadway including parking design, bulb-outs, and crosswalk enhancements. Details for the design of the plaza near the train station will also be reviewed. Construction of the project is expected to begin in the spring of 2012.

Conclusion

In keeping with the vision of the Comprehensive Plan, the California Avenue Streetscape Project is expected to result in the following benefits:

- a) provide improvements for pedestrian, bicyclist and automobile safety;
- b) enhance the overall appearance of the street and encourage pedestrian activity;
- c) accommodate an increased number of parking spaces;
- d) revitalize the plaza area for public use; and
- e) maintain high levels of service for vehicle use.

These improvements serve to support retail vitality along the street, create a sense of identity, and encourage new pedestrian/ transit oriented residential development that will patronize the local businesses and support the use of public transportation, especially Caltrain.

RESOURCE IMPACT

The engineer's estimate for the California Avenue – Transit Hub Corridor Improvements Projects is \$1,725,200. The City received a grant from the VTA CDT Program in the amount of \$1,175,200, and it becomes available to the City for use in February 2012. A \$550,000 local match from the Infrastructure Reserve Account will be required as part of the grant requirements.

The Council will be asked to set up a new Capital Improvements Program project account to fund the California Avenue – Transit Hub Corridor Improvement project on February 14, 2011, and staff recommends that the PTC recommend the new CIP to the City Council. To align the completion of the design phase with the release of the grant for construction of the project, a new CIP project is being pursued outside of the normal CIP review process to enable the design phase to begin immediately. A separate but concurrent roadway resurfacing project on California Avenue will be implemented during the construction of the California Avenue – Transit Hub Corridor Improvements project. The roadway resurfacing project is currently funded in the current CIP.

POLICY IMPLICATIONS

The City's Comprehensive Plan recommends that the City enhance the California Avenue streetscape by upgrading the visual quality of the street to attract additional business and visitors to the area. Consistent with those Comprehensive Plan goals, the proposed streetscape and place-making improvements along California Avenue should ensure continued growth of the California Avenue Business District. The Comprehensive Plan also encourages a mix of residential and non-residential uses at a scale of development that is comfortable for pedestrian use. The Plan encourages improving the appearance of the street while preserving its "home town" character. Also Program L-18 specifically calls out for street improvements that could make a substantial contribution to the character of commercial Centers, including narrowing travel lanes.

ENVIRONMENTAL REVIEW

The Initial Study and draft Negative Declaration are attached. Staff recommends that the Planning & Transportation Commission recommend approval of the Negative Declaration for the California Avenue Transit Hub Corridor Improvement project.

ATTACHMENTS

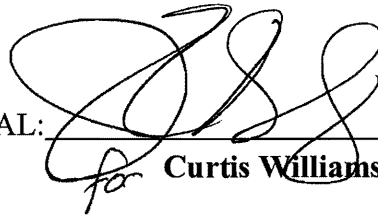
A: CEQA Initial Study/Draft Negative Declaration

B: TIA Study (w/o Appendices)

PREPARED BY:

Jaime O. Rodriguez, Chief Transportation Official

DEPARTMENT/DIVISION HEAD APPROVAL:

A handwritten signature in black ink, appearing to read 'CW', is written over a horizontal line. Below the signature, the text 'for' is written in a smaller, cursive font.

Curtis Williams, Director

Planning and Transportation Commission
Verbatim Minutes
January 12, 2010

DRAFT EXCERPT

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Chair Tuma: The first item is the California Avenue – Transit Hub Corridor Improvement Project. We will start with a presentation from Staff and then go to the public. Staff, I believe has a presentation for us, but before we get started with that I would like to say congratulations to Jaime on his new child who was just born yesterday. So amazing dedication for you to be here tonight and we appreciate that. Obviously shows how seriously you take this, and thank you very much.

NEW BUSINESS.

Public Hearing:

1. California Avenue – Transit Hub Corridor Improvements Project:

Recommendation of approval of the Negative Declaration for the California Avenue streetscape project that includes a proposed 4-lane to 2-lane reduction between El Camino Real and the California Avenue – Park Plaza.

Mr. Curtis Williams, Director of Planning and Community Environment: Thank you Chair Tuma and Commissioners. We are here tonight to discuss with you the proposed environmental review and CIP project for the California Avenue streetscape project. We are focused on those couple of items and want to clarify that the design specifics of a number of the features of the streetscape will still be under review for some time after approval of the environmental documents as we move closer to construction in early 2012.

The game plan for our presentation tonight is I am going to give a little bit of the context of this project and then turn it over to Jaime Rodriguez, our Chief Transportation Official, who will provide you with a little background on the grant project and the traffic impact analysis and the environmental review that we prepared, and then come back to me for the summary and next steps in the process.

The California Avenue vision that we believe the Comprehensive Plan and other City policies and documents points to is for a street that promotes pedestrian and bicycle safety, that compliments the adjacent land uses, businesses, residences, office, and retail commercial, and provides for pedestrian and bicycle amenities along the sidewalk near those businesses. And, a street that overall balances all modes of travel including transit and vehicular uses.

The Comprehensive Plan has policy language related to providing pedestrian connections in many places in the city, but particularly in these Downtown and California Avenue commercial areas, and encourages specifically walkability for the California Avenue area. It defines the area as a land use designation that is called Transit Oriented Residential. That is defined as being

1 appropriate for generating higher residential density and to support transit use, especially in this
2 case Caltrain and some of the other ancillary transit systems.

3
4 We have a Pedestrian Transit Oriented Development overlay on this general area around
5 California Avenue. Some of the goals of that district are to promote connectivity to the
6 surrounding, existing, and planned community through bicycle and pedestrian facilities, to
7 encourage streetscape design elements that are attractive to pedestrians and bicyclists, and to
8 support the use of public transportation.

9
10 One of the concepts that we are working towards on California Avenue and that is I think a
11 theme of the Comprehensive Plan more generally is what is called “complete streets,” and
12 making California Avenue a more complete street than it is today. Generally that means to use
13 the public right-of-way in the most efficient way possible and for as many different kinds of
14 users as possible. Whereas the street is currently predominantly geared to accommodate
15 vehicular traffic and it was originally in fact designed to be a through-street, but has not and is
16 likely never to get to that point given the railroad tracks and Alma, this proposed project tries to
17 achieve a multiple use and balance a variety of different types of modes as well as users along
18 the street. So we can first of all continue to maintain efficient vehicle movements, which is what
19 the traffic study is kind of all about. That we also though provide adequate room for pedestrians
20 and cyclists to use the street more safely. To add pedestrian improvements that can take you
21 across California Avenue more safely. Provide increased amenities along the streetscape for a
22 variety of purposes. Increase the landscaping and enhance the aesthetic characteristic of the
23 street so that we achieve those multiple goals within the right-of-way that we have available on
24 California Avenue.

25
26 So with that I am going to turn it over to Jaime and let him discuss the background of the project
27 specifically then get into the traffic study for you. I just want to also note that at the end of his
28 presentation Cara Silver, our Attorney’s representative will discuss some of the environmental
29 review implications that were outlined to you in a letter from Mr. Ross today.

30
31 Mr. Jaime Rodriguez, Chief Transportation Official: Thank you Curtis. Before I start I want to
32 real quickly introduce Bret Walinsky with Hexagon Transportation Consultants. Bret was lead
33 for the traffic impact analysis that I am going to go over for you and summarize tonight. If you
34 have any specific questions regarding that analysis Bret will be happy to answer those questions
35 for you.

36
37 So jumping right into things, we have been working on California Avenue actually for several
38 years at Staff level, but specifically over the last about six months we have had a lot of activity.
39 We actually started back at the end of July in anticipation of a new call for projects coming up
40 from the VTA for the Community Design and Transportation or CDT program that the City had
41 pursued in the past. So we put together a preliminary City concept plan line for what California
42 Avenue could be and shared that with the community over several community meetings through
43 September and August. We submitted a proposal to the VTA in October with all that feedback
44 that we received from the community. The meetings were very well attended with both good
45 comments and negative comments. We tried to implement and address as many as we possibly

1 could. I think we came up with a really good plan at that point that had a lot of consensus from
2 the community regarding the input that was provided.

3
4 We were successful in receiving a \$1.2 million grant. We originally requested a \$1.1 million but
5 after the funding distribution we received an additional \$100,000 for our project. So the VTA
6 recommended during that scoring process, to award us \$1.2 million, which requires an
7 approximately \$550,000 local match. That is just rounded up to \$1.8 million in the figure that is
8 shown above you. We did go to the City Council for adoption of a Resolution back in December
9 that basically just said if the VTA Board of Directors approves our project and forwards a
10 recommendation to MTC that we would accept the funds pending an environmental review and
11 approval of a project at the local level. The VTA Board approved the project just a few days
12 later at the VTA Board of Directors Meeting in December as well. MTC has also approved our
13 project but is waiting for our approval at local level.

14
15 So what our project includes is several what I consider exciting items for the street. Some of
16 them include brand new community identity markers that I can show a little while later, but
17 builds upon an architecture for the street. Down at the bottom is a potential replacement sign for
18 the existing California Avenue sign that is at the entry of California Avenue and El Camino.
19 That public art piece would get relocated to a different portion of the street, and this sign is an
20 option for what could go there in its place. Then that same architecture and color gets distributed
21 through along the rest of the street through markers, the development of a decorative pavement
22 that divides the roadway from the parking elements themselves. It includes we call roadway
23 chicanes, they **double** as planters for the rest of the corridor, and help to kind of choke down the
24 roadway a little bit. Those **double** as locations for additional community markers that can house
25 historical or community specific historical information about the area. They also can double as
26 areas for larger shade trees. There is a proposal in the project for the deployment of additional b
27 benches and other streetscape elements like additional bike parking throughout the corridor,
28 consolidated news racks, and things like that.

29
30 Then some of the traffic calming improvements include bulb-outs at selected intersections as
31 well as all of the mid-block crosswalk locations supplemented with pedestrian activated flashing
32 beacons for additional safety. All those mid-block crosswalks would become raised crosswalk
33 tables for enhanced safety for the pedestrians as well.

34
35 Of course, the major item in there is a proposed four-lane to two-lane reduction, which is really
36 how we sold the project to the VTA to help tie in the pedestrian connectivity of the street to the
37 exiting land, the adjacent land uses, and the transit uses at the Caltrain station as well as the VTA
38 and other public transit services along El Camino Real. What we are going to show you tonight
39 is the traffic impact analysis that was done to show that a four-lane to two-lane reduction would
40 not have a significant impact to the corridor. That is the data that we will be showing you now.

41
42 What we did was back in early November was we actually hired two different consultants. One
43 was a traffic data collection company, Mark Thomas. They collected traffic data, turning
44 moving count data at every intersection of cars turning left, cars turning right, and cars going
45 through, pedestrian activity, and that kind of stuff. We also collected volume data at all the mid-
46 block locations along Sherman, Cambridge, California, and the side streets like Ash, Birch, and

1 Park Boulevard. Then we contracted with Hexagon to actually analyze that data and try to
2 determine what type of an impact, if any, a lane reduction might have along California Avenue
3 for four lanes to two lanes. We asked Hexagon to look at three specific elements within their
4 analysis. One is intersection Level of Service analysis, which really looks at delay to move
5 through an intersection, and I will go over all the study intersections shortly. We also asked
6 them to look at link level analysis, which is looking at the mid-block portions between
7 intersections to see if there would be a queuing or other types of impacts along the corridor from
8 the reduction. We also then asked them to look at the conceptual plan line that was put together
9 with all the community input over September and October and say hey, you have never been
10 involved with this project, take a look at it and give us from a fresh set of eyes things that we
11 could do to this potential concept plan to improve it, to make it safer, or to make it a better
12 traveled roadway for the community. We had received several very good recommendations from
13 Hexagon I think, and we have implemented all of them. We shared that information with the
14 community and received positive responses to those suggestions as well.

15
16 So real quickly here are the study intersections. There are seven all together: El Camino Real,
17 California Avenue, and basically all the intersections along California Avenue, Ash, Birch, the
18 two Parks. We call this Park West and then Park East closest to the Caltrain station. Then we
19 wanted to pick one intersection at each of the adjacent streets, at Cambridge and Sherman, to
20 analyze any type of a rerouting of traffic that might happen as a result of the lane reduction. So
21 we looked at Cambridge and Birch as well as Sherman and Birch.

22
23 This is a real quick snapshot of the ADT, or the Average Daily Traffic Volume. This is all the
24 vehicles that are traveling east and west on either street, or north – south. So you can see here as
25 expected just before El Camino Real on California Avenue that is where the largest volume
26 happens throughout the day, and that is because that is really the entry as well as the main exit
27 out of the California Avenue district. You can also see that as vehicles progress down through
28 Park that volume starts to significantly reduce. We also show you the volumes on Sherman as
29 well as Cambridge by block segment, as well as the individual intersections. So just a quick note
30 here is Birch, which becomes two-lane after California Avenue has more volume than California
31 Avenue does to the east of Birch as a reference.

32
33 One of the other things that we wanted to do for you was kind of try and frame what these
34 volumes look like in comparison to other similar downtown core type areas in other cities along
35 Santa Clara County and within the peninsula. So if you look down at the bottom California
36 Avenue again the highest volume portion near El Camino has about 5,300 vehicles per day total
37 traveling through that block segment. University Avenue in Palo Alto has about just under
38 19,000. To give you kind of a mental image about what the volumes are like on that street
39 compared to another one within our city. We also pulled out some volumes that are called out by
40 the cities. Menlo Park just to the north of us on Santa Cruz has just over 15,000 vehicles per
41 day, a little bit more similar to what you see along University Avenue in Palo Alto. Then
42 Mountain View the same, about 14,000, on Castro Street. Those of you that are familiar with a
43 little bit more of the south, Los Gatos that is about 16,000 vehicles on Santa Cruz Avenue as
44 well. The main difference here is that all of these streets connect to something. University
45 Avenue specifically connects 101 down towards El Camino Real, down towards the Stanford
46 University area. The same thing with Mountain View it connects Central Expressway with the

1 El Camino Real off to the west. Then Los Gatos really serves to connect Highway 17 at the
2 southern tip down to Lark Avenue to the north of it on the other side. So one of the reasons why
3 you have such a lower volume on California Avenue is specifically for the reason that Curtis
4 mentioned earlier, California Avenue doesn't really connect to anything, it kind of ends at
5 California Avenue at the Caltrain station because of the tracks. It was at one point envisioned to
6 be a connecting street to Oregon Expressway but that never happened. It is very likely not to
7 occur into the future.

8
9 So really quick again I am going to talk about the first element we asked Hexagon to look at
10 which was the intersection Level of Service. Those of you on the Commission are probably very
11 familiar with that concept. Intersection Level of Service is a measuring of delay to move
12 through that intersection. The main thing to point out here is that delay is measured differently at
13 an all-way stop than it is at a signalized intersection. At a signalized intersection people would
14 expect to wait a little longer because you build up a queue at a red indicator and then when it gets
15 green traffic flushes through versus an all-way stop where you are expected to kind of get there,
16 kind of move relatively quickly once the traffic ahead of you has moved forward.

17
18 So what we are showing here is for the seven study intersections that we did what the existing
19 Level of Service is by different periods of the day. So in the morning, in the afternoon during
20 the lunch hour peak, and then the PM this is the approximate delay and the approximate Level of
21 Service that you get traveling on California Avenue. Probably what you would expect. The
22 biggest delays are down at El Camino Real, which is a signalized intersection, but it is about the
23 same delay throughout the day. That is really the main thing to take away from there for El
24 Camino Real. The rest of the corridor works very well today as the four-lane corridor as you
25 would expect because there is so much roadway capacity with four lanes on the street. So one of
26 the first things that Hexagon did for us was said let's take those same volumes and look at a two-
27 lane analysis at those intersections and figure out if there is any kind of significant impact. What
28 we found is that whether you are at four lanes or two lanes really there is no large increase. The
29 largest increases are really in the afternoon and that is less than one second delay during the
30 lunch hour peak to move through the intersection at Ash Street. So what that actually shows us
31 is that there really is no impact with the lane reduction at an intersection Level of Service. That
32 was something that we were expecting during the earlier community meetings. We were telling
33 the community that we didn't expect to see but this is the confirmation of those comments that
34 we made earlier to the community. It was also something that a lot of the people at the previous
35 community meeting we had back in December also comment on that that is what they would
36 have expected as well. So this was a very important finding for us as part of this study to see that
37 actually be the case.

38
39 The second thing we asked Hexagon to look at was that link level analysis. Look at each of the
40 individual mid-block segments along California Avenue and try and figure out if there was any
41 traffic that was diverted to another street and if it would result in an increase or mid-blocks if the
42 two-lane to one-lane reduction in each direction of California Avenue would have an impact.
43 Today under four lanes, we look at both eastbound and westbound on California Avenue, and
44 basically it is a Level of Service A corridor today. You have basically the capacity of about just
45 under 1,400 vehicles per hour that can travel through the corridor but you never even really get
46 close to that volume. Unlike Level of Service at an intersection when we look at the mid-block

1 segments we look at actually what is called a ratio of volume to capacity. It is obviously the
2 higher your volume plus the capacity the worse your Level of Service gets. We used a
3 conservative, just under 1,400, vehicle capacity today. On a freeway you would expect to see
4 closer to 1,800 vehicles per hour or 2,000. So 1,360 is rather conservative. When we look at the
5 comparison of four-lane to two-lane we didn't obviously assume a reduction in the capacity, but
6 rather than just cut that in half we assumed an even lower capacity to account for vehicles that
7 are backing in and out of their parking stalls because that would actually reduce the capacity that
8 can move through if traffic were moving freely. So we used a very conservative 560 vehicle per
9 lane per hour capacity for the street.

10
11 What we did find is that there is some impact. We have Level of Service A today that is what
12 the existing four-lane shows. When we move to two lanes in some corridors during certain times
13 of day we go from A to B. Level of Service B is still a very high level of service for a corridor.
14 The City considers an impact to a corridor or intersection when we get to a Level of Service E or
15 worse. We are nowhere near that with this particular finding here today. So again just to point
16 out that we assumed a very conservative lower capacity of the roadway under two lanes versus
17 four, and what we see with that is that there is really less than a significant impact with the lane
18 reduction on California Avenue.

19
20 As a result of both that finding for the link level as well as the finding for the intersection we can
21 safely say that there really should be no traffic diversion to Sherman or to Cambridge, which was
22 one of the comments that the community was providing to us during the earlier community
23 outreach process.

24
25 So the last thing we asked Hexagon to look at was again that second set of fresh eyes looking at
26 our plan to say how can we approve this, how can we make this a better design. This was
27 actually very important for us because this design will take a year if the City Council approves
28 the environmental findings as well as the project for us. That will happen in the early February
29 timeframe. This concept plan line will serve as the basis for the design. So we anticipate the
30 design to move forward relatively quickly because we will focus the design more on the texture
31 or the elements that are placed along the corridor where it will focus on architecture for benches,
32 or focus on architecture for bike racks, bike rack locations, those types of things. The general
33 structure and location of the chicanes, the locations of the mid-block crossings those will become
34 a fixed point at this level, at the concept plan line. So it was very important for us to ask
35 Hexagon to look at that and say how can we improve it now so that when we move forward we
36 know that we started off at a good point at the design level.

37
38 So the very first thing that Hexagon recommended to us was really two things at the El Camino
39 Real intersection. One is westbound approaching El Camino Real, coming from Ash towards El
40 Camino basically exiting the California Avenue Business District that we actually maintain the
41 two-lane westbound approach a little longer than we were originally recommending. This is
42 actually a really good recommendation by Hexagon, and I will show that you in just a minute.
43 The main reason for doing that is because when traffic is exiting California Avenue as you
44 approach that very first crosswalk in front of the bagel shop on California Avenue any traffic or
45 stacking over two lanes today has to then stack over one lane, which becomes a longer queue.
46 So maintaining the two-lane capacity for those vehicles that are there today is a good

1 recommendation because it lets traffic exit the California Avenue Business District a little easier
2 as they are trying to exit the district.

3
4 The other thing that Hexagon recommended was that we eliminate the lane merge that happens
5 as you enter California Avenue off of El Camino. This will make a little bit more sense once you
6 see this. If you were making a southbound left off of El Camino into California Avenue it is
7 only one left turn. If you are making a right turn into California Avenue coming from Chipotle
8 or coming from Page Mill there is just one lane that makes a left. If you are coming from the
9 College Terrace neighborhood there is only one lane that feeds into California Avenue. So you
10 really have two lanes today. You don't really need two lanes because you never have more than
11 one lane feeding into the community to begin with. One of the comments that we received,
12 several of the comments that we received through the community meeting process was that when
13 the Stanford Marguerite Shuttle stops at its very first stop, which happens to be located at this
14 location, it causes a jam for people that are trying to get into California Avenue because the bus
15 blocks access to the lanes that traverse over that mid-block crosswalk. So we actually
16 outreached to Stanford to say do you really need this stop? Is it a critical stop for you as far as
17 your pick ups or drop offs? What they told us was yes it is. So we came up with a really good
18 compromise with Stanford to move that into this additional area. At one point we thought about
19 expanding that sidewalk, maybe adding more tree planting areas, but it is kind of nice to keep the
20 pavement as it is and just make it a good bus stop for the Stanford Marguerite so it is not in the
21 way of traffic that traveling on California Avenue. It eliminates that immediate concern that the
22 community was providing to us about this location here.

23
24 A quick note is that Stanford is planning on eliminating the Marguerite Shuttle that is in this
25 location on their own. Independent of our analysis they were already looking at that because it is
26 a low ridership. So I understand that they are moving forward to eliminate that stop this coming
27 spring or summer.

28
29 This again shows the extended two-lane approach to El Camino Real just before that crosswalk
30 in front of the bagel shop, in front of La Boudegita. To make sure that there isn't any conflicts
31 with cars that want to back out of there we are actually suggesting that five brand new parking
32 spaces that we were originally picking up in this area would go away. So we have 12 parking
33 stalls in this block segment today. We actually maintain 12 through this concept. There is not
34 net loss, but there is no net gain either in that particular block segment along the north side. This
35 also introduces a new area for either providing outdoor seating, more planting, or just a wider
36 sidewalk in general. What is actually there would actually be decided during the design process
37 that would start in the spring if this project were approved.

38
39 The second set of recommendations that Hexagon made focused down at the California Avenue
40 and Birch Street intersection. Specifically they like at El Camino were saying get rid of any
41 weaving that you are doing, and also to provide a dedicated westbound right turn lane at the
42 intersection. What that looks like is this. This was actually was the very first – this westbound
43 approach was the first concept that we showed to the community back in early September. We
44 tried to respond to the community's concerns about lane capacity by reintroducing a left through
45 and a through right lane concept. That was what was actually submitted in the concept to the
46 VTA as part of our grant proposal. What Hexagon is basically saying is make that a right turn,

1 which eliminates the need for any weaving in this other area between Birch and the very first
2 mid-block crosswalk. If I am right going off memory, I believe that is where the **Printer's Café**
3 is. That was a good recommendation. Again, now that we have kind of shown from both a link
4 level and an intersection Level of Service standpoint that the roadway works under two lanes we
5 have that flexibility to try and go back to something that operates more efficiently for the street,
6 and that is what this shows.

7
8 A highlight for you, this is the bulb-out area that we were referring to earlier. One of the nice
9 things that happens here is that the skewed crosswalk that is existing gets straightened out with
10 this particular project.

11
12 A last set of recommendations made by Hexagon included recommendations to reconfigure some
13 our proposed 60 degree angle parking back to 45 in areas where the adjacent lane widths were
14 narrower. That happens really only at two locations. Here at Park Boulevard West and Park
15 Boulevard East in front of the Caltrain station we originally had these as 60 degree parking
16 within our original plan line concept. They are 45 today. We just put them back to 45 degrees.
17 That works better because as you are backing out of the stall you can do so without impacting or
18 traversing into the through lane in the opposite direction. So that was a good recommendation
19 from Hexagon and we have implemented it in this plan. It was a recommendation that the
20 community seemed to be very receptive to that we made back in December as well.

21
22 A final recommendation by Hexagon was that any location where we were recommending brand
23 new crosswalk that we make sure that we provide ADA access through ADA compliant handicap
24 ramps. So at Park Boulevard West this is a brand new crosswalk that is not there today so this
25 would require the installation of a ADA accessible ramp at this location. As well, this is a brand
26 new ramp here and this is a brand new crosswalk here as well. So those would be of course
27 ADA compliant ramps.

28
29 So with that there really are again no significant impacts from the operations, recommendations
30 that are made by Hexagon, and as a result no negative finding within the Declaration for the
31 Transportation Element of the study. So with that I am going to hand it back over to Curtis to go
32 over some of the other elements that are studied as part of the CEQA Checklist for the project.

33
34 Mr. Williams: Thank you Jaime. So the primary issue here was the traffic. We didn't see any
35 significant impacts. There were some that required some discussion but there were not any
36 significant impacts in any other areas. There weren't any significant impacts in the traffic either
37 but obviously going from four lanes to two lanes required a thorough analysis of that. So the
38 conclusion is that there is no impacts in any of those categories so it was not required to have any
39 mitigation measures that might otherwise be required.

40
41 So just to sort of sum up what we see as the project benefits again are the multimodal use of the
42 street, increased safety for pedestrians and bicyclists, enhanced amenities such as benches,
43 tables, landscaping, signage, bike racks, news racks, etc. We see this as being as all helping to
44 encourage and increased opportunity for public interaction through again some wider sidewalk
45 areas, bulb-outs, outdoor seating areas, some public art elements that would be areas that would

1 be available for that. In the context of all of that then still continuing to provide a high level of
2 service for automobiles and transit that do use the corridor.

3
4 The next steps in this process, we are basically at the bottom of this slide now on the January 12
5 date with the Commission. We are scheduled to go to the City Council on February 7 to present
6 the environmental review to them and also to have them establish the CIP project. That is
7 another item on your tasks as far as the actions that you are taking tonight, to recommend as the
8 Commission does as part of your purview recommend CIP projects to the Council, and
9 particularly the finding that it is consistent with the Comprehensive Plan, which I think we have
10 outlined we believe this project is.

11
12 So then later this year, after the environmental clearance is made and the CIP project is
13 established, we will be beginning the detailed design component. We are having a consultant
14 brought on board to help us with that detailed design. We will have a number of community
15 meetings at that time and we will talk about some of the specifics of what has been discussed
16 here. There is quite a bit of room for flexibility in terms of signage and whether a bulb-out is
17 used for additional landscaping or used for some restaurant seating, etc., etc. So all of those
18 reviews will take place over about a 12-month period. We will be back to no only the
19 community at large but also to the ARB and to the Planning and Transportation Commission for
20 your input on those design features. Then hopefully we will begin construction in early to mid
21 2012 with the project.

22
23 So our recommendations are first to recommend approval of the Negative Declaration for the
24 project and secondly to recommend to the Council to establish a Capital Improvement Project
25 account to fund this project. That concludes our presentation. Cara would you like to respond to
26 the letter?

27
28 Ms. Cara Silver, Senior Assistant City Attorney: Thank you Curtis. We just received a letter
29 from William Ross, an attorney representing some of the merchants, residents, and taxpayers in
30 the City of Palo Alto that I wanted to respond to. He raised three procedural points with respect
31 to the Negative Declaration.

32
33 The first was he said that the Negative Declaration was not distributed to the County Clerk and
34 other responsible agencies such as the VTA and the MTC. Staff did some research on this
35 quickly this afternoon. It appears that the Notice of Intent to Adopt the Negative Declaration
36 was filed with the County Clerk. We could not verify whether it was served on the VTA and the
37 MTC. We will relook at that issue tomorrow, and if it has not been distributed to those two
38 agencies we will of course do that first thing tomorrow morning. Then we will extend the
39 comment period appropriately so that those agencies can comment on the Negative Declaration.
40 VTA and MTC of course are aware of this project and have been kept apprised of the general
41 parameters of the project. So we don't expect that that will delay the process significantly.

42
43 The second point was that the Planning and Transportation Commission should not review the
44 Negative Declaration until the formal 20-day comment period has expired. As you know, it has
45 been the Planning and Transportation Commission's practice and role to review the Negative
46 Declaration towards the end of the comment period so that the Planning Commission can provide

1 substantive comments to the City Council, who is ultimately adopting or certifying the
2 environmental document. So by reviewing it during the comment period this allows for some
3 substantive input by the Planning and Transportation Commission. There is no legal requirement
4 that the Commission wait until the end of the comment period to make those comments and
5 recommendations to the full Council.
6

7 Finally, Mr. Ross raised the issue of whether the document should evaluate the economic
8 impacts associated with the project, and typically environmental documents do not evaluate
9 economic impacts unless those economic impacts have tangible, physical environmental impacts
10 associated with them. In this case, we do not believe there are any such physical impacts that
11 could be triggered by an economic impact. In fact, this project in essence will be an economic
12 stimulant to the area by providing more pedestrian amenities and that type of thing.
13

14 So I think that addressed the major procedural points that Mr. Ross raised in his letter. I would
15 be happy to answer any further questions.
16

17 Mr. Williams: I would like to suggest that also Jaime briefly touch on number one the net
18 increase in parking spaces for the street in this plan, and secondly the accommodations for
19 bicycle parking that are being provided with the plan. We do believe that the plan in effect not
20 only provides some additional vehicular parking but that the enhanced bicycle parking as well
21 will encourage more people to bike there and minimize, at least to some extent, the need for
22 additional vehicular parking.
23

24 Mr. Rodriguez: Thanks Curtis. If it is okay, what I want to do is kind of walk you down the
25 corridor. I didn't do that in my first presentation. That might be something of value to you as
26 well as the people in the audience through the discussion of the project.
27

28 This is California Avenue. Down towards the left end of the screen is El Camino Real. You
29 have already seen portions of this during the presentation. This is showing the bus stop that gets
30 relocated a little bit to the west just in front of the bagel shop. It shows the extended two-lane
31 westbound approach approaching the El Camino Real signal.
32

33 One of the things we did with this project that was a major change was if you look here you see
34 this really acute, probably like a 30 degree parking angle along the south sides and north sides of
35 California Avenue. One of the things we did with this project is we are proposing a 45 degree
36 angle change. The existing...
37

38 Chair Tuma: If I may, I just want to interject a comment here for both Commissioners and the
39 public to be aware of. As we are going down and looking at this design this is sort of the state of
40 the state right now. But we are not as a Commission tonight giving the thumbs up or thumbs
41 down on the specific design but rather, the other issues, the environmental issues and the CIP.
42 So while it is great to have this information this is not necessarily what we are recommending up
43 or down or sideways tonight in terms of the specific design. So just to sort of set the stage and so
44 the public is aware of that as well.
45

1 Mr. Rodriguez: That is a good comment, Commissioner. That is true. Again, one of the things
2 we did was we went from the very acute angle to a more standard 45 degrees because even with
3 the acute angle today we don't meet our existing parking guideline standards as far as the depth
4 required for a parking space, and depth of an aisle behind a parking space for you to back into
5 and out of a stall. This actually brings us into compliance with our 45 degree parking standards.
6 So what this shows is a 16-foot parking depth that is divided from the adjacent traffic lane by a
7 three foot concrete band. It is not a bike lane it is just a decorative aesthetic band down the
8 corridor that visually breaks up the street, from the black asphalt, from the proposed concrete
9 parking bays. So even though the concrete parking bays were an aesthetic impact, as well as a
10 long-term maintenance effect because the concrete will last a lot longer than asphalt will. So
11 overall resurfacing for the street is now reduced because before we would be resurfacing the
12 entire roadway, curb-to-curb, which is a little over 60-feet, and now actually our roadway
13 resurfacing is actually narrowed down to just over 30-feet, which is half. Half of that cost for the
14 concrete parking is actually picked up by the grant versus what would normally be paid out by
15 the City as part of a Capital project. What those bands look like we will work with the
16 community through the design process as well as the Architectural Review Board. Just a quick
17 note, we do plan to go to the Architectural Review Board if this project is approved by the
18 Council very early on, probably as early as late March or early April just to kind of begin to let
19 them see this. They have not been involved as part of this process but we do plan to bring them
20 in.

21
22 So again, as we approach the first mid-block locations we actually raise the street to make sure
23 that the mid-block crosswalks serve as a traffic table that you would see along a more residential
24 collector street. That serves to slow down traffic throughout the corridor to make sure we never
25 have an increase in vehicle speeds down the corridor. We also maintain all of the existing
26 parking locations. It is kind of hard to see my mouse there, but I am kind of waving it over the
27 bus. One of the things that we showed as an option in the plan is that just approaching Ash
28 Street these current four proposed parking stalls, which Hexagon also recommended to make at a
29 45 degree angle to allow back into and out of without going into the opposing lane, we actually
30 envisioned that also to be a potential location for an outdoor seating plaza. So during farmer's
31 market events, or other types of events where there is some type of a closure between Ash and El
32 Camino Real there is an area for people to begin congregating and dwell together, in addition to
33 just the street. That is not something that we are prosing at this time it was just thrown in as an
34 option. We want to reintroduce that concept during the actual design process. s right now there
35 is no suggested parking loss but if the plaza were pursued during the design we would end up
36 with just two spaces in that block segment between the crosswalk and Ash versus the six we
37 would have today if there were no plaza.

38
39 Moving down along the corridor. Again we have maintained that 45 degree angle concept. We
40 begin to introduce these planter or chicane locations mostly all located in front of the mid-block
41 crosswalks so we can have the pedestrian activity flashing beacons be housed in these locations.
42 Those locations can also serve as locations for the larger shade trees for the corridor. They can
43 serve as the locations for community identity markers for the street, or they could be additional
44 public art future locations, whatever it is that the community wants. It is really a community
45 driven decision.

46

1 Moving down the street down towards Birch, you saw this during the presentation with what the
2 intersection improvements looked like. Again, at some locations we tried to maintain more than
3 a one lane approach to make sure that the roadway maintains an efficient operation. So we split
4 off here the right turns from the throughs and the lefts. That is what we are trying to show in this
5 particular slide, or this portion of the diagram.
6

7 As we move down again at the mid-block crossing locations we introduce these additional
8 chicane areas, which again are either planting areas or tree areas or marker areas to be decided
9 later.
10

11 Approaching the rest of the corridor now at Park Boulevard West, this is the brand new
12 crosswalk. One of the things you notice is all the crosswalks are now 90 degrees, smaller
13 crossing distances for pedestrians who are crossing through the corridor.
14

15 As we move down towards Park Boulevard East one of the comments we received early on from
16 the community as well as the owner of the Mollie Stone's Market is they wanted to make sure
17 they had good access into the store. That is what this did. We provided this very long left turn
18 pocket to Park Boulevard West, and this also serves as a left turn pocket for the shopping center.
19 That was something we thought was well received by the community when we showed that to
20 them. As we began implementation of a bike boulevard project along Park Boulevard it is an
21 important design element for us to have that separate left turn lane for bicyclists that are traveling
22 south to north through the corridor.
23

24 At the Park Plaza one of the proposals we had was actually to eliminate the stalls that are there to
25 be able to provide an opportunity to introduce a larger clean canvass for that park itself. So I
26 know we are going to start working fairly shortly, we have already started having discussions
27 with the public art staff here locally to talk about the replacement fountain and where it goes.
28 One of the things you will notice here is it is very hard to put in a pedestrian ramp at this location
29 because the fountain gets in the way. So when we begin the design the new fountain will have to
30 move slightly southwest, probably about 15 feet, to accommodate that pedestrian access. One of
31 the things we will also be looking at is for the tunnel access coming out that goes underneath the
32 park. We want to make sure we tie that back to the street for the future bike boulevard project.
33 So the initial question, which was how many parking spaces do we end up with? Today there are
34 111 and with the changes that we have implemented from Hexagon the 45 degree angle
35 recommendations at some locations, the maintenance of those two-lane approaches approaching
36 El Camino Real where we lost five that were new spaces but will remain net neutral with 12
37 existing, we end up with 128 future spaces. The number of future bike rack parking will
38 significantly increase as the design moves forward. For those of you that are very familiar with
39 the area there is a large cluster of bicycle cages along the plaza. We have already outreached to
40 Caltrain about relocating those onto their property. They don't have as busy of a parking lot now
41 as they did in the past because of the Baby Bullet implementation previously. So we want to
42 take the lockers move them onto the site and we will instead provide more rack style parking, as
43 well as rack style parking along the entire corridor. So although the exact number hasn't been
44 determined we are envisioning somewhere closer probably between 75 to 100 brand new bicycle
45 parking spaces through the corridor. If we are successful in getting our wishes we are actually
46 beginning implementation of a bike share program with the VTA. I want to make sure we house

1 a bike share station facility near the entrance of the station itself, potentially on that plaza or
2 somewhere near there.

3
4 Vice-Chair Lippert: A quick question. That 128 proposed parking spaces, does that include
5 handicapped on street?
6

7 Mr. Rodriguez: With this design we didn't introduce any brand new – we didn't propose any
8 disabled parking spaces. I think as we move forward with design if the community so wants that
9 we can reintroduce that. The only disabled parking spaces today are the one that is in front of
10 Mollie Stone's. This actually proposes to remove that disabled space.
11

12 Vice-Chair Lippert: Actually, I think you have a couple of disabled parking spaces on California
13 Avenue. You might want to take a look at that.
14

15 Mr. Rodriguez: Any other questions?
16

17 Chair Tuma: Procedurally, go ahead and wrap up. We are going to go to the public and then we
18 will come back for questions. Okay, great.
19

20 Okay, a couple of things. Just for the record, Commissioner Fineberg joined us right after the
21 roll call but before this item started. So she was here for the whole item.
22

23 We are going to go to the public now. At this point I have only four cards from members of the
24 public. So if there is anybody else who would like to speak please bring the cards up to the table
25 here. Anybody else? Okay. So with that we will go through members of the public. I think we
26 are going to have six, seven, eight, or something like that. So members of the public will have
27 four minutes apiece to address the Commission. We will start with it looks like Gil McMillan to
28 be followed by Robyn Duby. Welcome.
29

30 Mr. Gil McMillan, Palo Alto: Okay, I guess I will just bullet it. Number one, who asked for
31 this? It has never been made clear. I have attended any number of or at least three or four
32 meetings of business folk and the residential meetings. There was never a strong sentiment
33 expressed for it. There were serious negative sentiments expressed against it in each meeting,
34 which the gentleman neglected to mention.
35

36 As to cyclists on the sidewalk, right now they are a hazard. The sidewalks are narrow. There are
37 restaurant tables and chairs. And as I understand it the chairs will merely increase the number of
38 people riding the bikes on the sidewalk because with one lane and cars backing out it is going to
39 be more hazardous for cyclists than less. I am there every day I see it. The second lane is
40 available for backing out so that the traffic continues to flow, a fact which I think the traffic
41 survey did not consider.
42

43 The other thing is you might test this concept with paint. For \$5,000 to \$10,000 you could paint
44 these in and see whether this is going to work or not before committing this much money to a
45 project of questionable value.
46

1 The other fact, and the hard fact that no one seems to want to accept is that people come there by
2 car. The overwhelming majority of people are there in automobiles. You might like them to
3 walk. You might like them to cycle. But that is not what they are doing.
4

5 There has been no consensus at the business meetings, the merchants on California Avenue. As
6 a matter of fact there was a meeting on this past Friday at which there was significant opposition
7 expressed.
8

9 Mollie Stone's anticipates a serious negative effect if the lane reduction occurs because people
10 come to Mollie Stone's to shop, you go home with three bags of groceries, you are not doing it
11 on a bicycle, you are doing it in a car.
12

13 The question is who – he spoke of many amenities – who maintains these amenities, the tables
14 and chairs? Right now the farmer's market is a disaster for the businesses that are open on
15 Sundays. Scarcely a merchant is in favor of it. It might do better moved to the VTA parking lot
16 and then it might bring business to the area. Right now it is an inhibition to business.
17

18 Remember that University, Castro, and Santa Cruz are all congested streets. Many people don't
19 go there any more for that very reason. It is sort of the Yogi Berra problem.
20

21 The essential problem of California Avenue is parking. If you are going to help the merchants, if
22 you are going to increase economic activity, if you are going to increase your sales tax revenues
23 get adequate parking. Right now from eleven o'clock in the morning until two-thirty or three
24 there aren't any spots, and from five-thirty or six to nine or ten the same is true. So if you wish
25 to help the folks on California Avenue provide parking and figure out a way to get the bikes
26 rerouted around in their own lanes. Thank you.
27

28 Chair Tuma: Thank you. I think one of the Commissioners has a question for you if you
29 wouldn't mind coming back to the podium. Thank you.
30

31 Commissioner Keller: Thank you sir. I am wondering if you are one of the merchants on
32 California Avenue?
33

34 Mr. McMillan: Yes, Accent Arts. The art supply store.
35

36 Commissioner Keller: Thank you very much.
37

38 Chair Tuma: Okay, Robyn Duby followed by Todd Burke.
39

40 Ms. Robyn Duby, Palo Alto: I am a 20-year resident of the College Terrace neighborhood and I
41 am here this evening to support the Staff's recommendations to the Commission to approve the
42 Negative Declaration.
43

44 What I would also like to do is commend the Staff for their process of inclusiveness and
45 responsiveness to the community. Unlike the California Avenue street debacle they have really
46 kicked in and done due diligence in collecting the community's input. The due diligence has

1 included doing this independent traffic analysis, which shows that there is no or very little
2 significant impact. So on that basis alone the data showed that we should recommend going
3 forth in recommending to the Council a Negative Declaration.

4
5 I think that it will be a great revitalization of downtown area. I have driven and bicycled down in
6 the area in equal parts. I rarely encounter, rarely, rarely in 20 years two people going in the same
7 direction using the two lanes. So I see that the functionality of the 1950s where it was a
8 throughway for Alma to El Camino is no longer something that is needed. What is needed is a
9 revitalized downtown California shopping area. Thank you very much.

10
11 Chair Tuma: Thank you. Todd Burke followed by Ellen Fletcher.

12
13 Mr. Todd Burke, Palo Alto: I actually live on California Avenue. The windows of my
14 condominium at Palo Alto Central overlook the park, the beautiful bike storage lockers provided
15 by VTA. I am here on behalf of myself although I have spent a lot of time speaking with my
16 neighbors and friends and various people who use the street. I am on the street every day since I
17 live there. I am a frequent patron of many of the businesses. Although I am not an artist I
18 appreciate the Accent Arts business.

19
20 I personally am in favor of the plan. I think that there are some things that ultimately need to be
21 addressed between now and the time that construction commences. I think there are some details
22 to review, and I think the team has put together some openness for that. I also share a little bit of
23 the concern that the businesses do about an impact on them. I am hoping that the City has some
24 way of working with and negotiating certain aspects of the plan with the various businesses.

25
26 Although I am in disagreement of a number of things mentioned that might otherwise be
27 opposition. There was a comment made about who asked for it? I wholeheartedly raise my hand
28 and say I am asking for it. I live on the street. I look at the 25 to 30 year old garbage cans, and
29 bent bike lockers, and bad sign stands, and everything that could be improved about the street.
30 So I for one am an individual here standing before you mentioning that I am asking for it. I may
31 not have asked for it by the time the plan was put in place, but I am.

32
33 I also find that there are a lot of neighbors who may not be here tonight, folks who live and use
34 the street who are also in favor of seeing some level of beautification. So I am in favor of you
35 accepting the Negative Declaration and moving forward with the plan. Thanks.

36
37 Chair Tuma: Thank you. Ellen Fletcher followed by Terry Holzermer.

38
39 Ms. Ellen Fletcher, Palo Alto: I rode my bike to Mollie Stone's last week and then was
40 approached by a lady who was gathering signatures against the project. She tried to pursue me
41 that reducing the lanes from two in each direction to one would endanger bicyclists because they
42 would have to share the lane. Well, I can assure everybody that is not going to happen. It is not
43 more – in fact the Palo Alto Bicycle Advisory Committee strongly recommends this project.
44 There wasn't anyone on the Committee who had any doubts about the safety of the current plan.

1 I might point out that we share lanes all over town including on University Avenue where the
2 lanes are much more narrow and traffic volume is much heavier. So California Avenue is a very
3 mild street for bicyclists ride their bikes on.
4

5 So I am really in favor of the project giving more space on the sidewalk for activities on the
6 sidewalk. It is really nice when you go to Castro Street and see what they have done regarding
7 the pedestrian amenities. It is really very pleasant. So I do hope that you will agree with the
8 Staff's recommendation on this issue. Thank you very much.
9

10 Chair Tuma: Thank you. Terry Holzemer followed by Cedric De La Beaujardiere.
11

12 Mr. Terry Holzemer, Palo Alto: Good evening Commissioners. I am the President of Palo Alto
13 Central, which is the large condominium complex located at I guess you could say the foot of
14 California Avenue.
15

16 First of all, I would like to thank the Staff for all the hard work. I know they have put a lot of
17 hours into this plan and this design. However, I am here representing an opposite viewpoint.
18 From the project's inception we have voiced our grave concerns to the City Staff about this
19 project, but unfortunately many of those concerns have fallen on deaf ears. However, I am in
20 agreement on one central theme. California Avenue needs improvement. The businesses are in
21 agreement with that. The residents are in agreement with that. Where the devil is, of course, is
22 in the details.
23

24 If you walk California Avenue like I do almost every day and talk to individual merchants and
25 residents who live and work there one thing is perfectly clear. Please repave the street. We have
26 understood for many years that the money has been there but there has been a long delay given
27 the various decisions to delay the project for a number of reasons. It is also clear from everyone
28 that I have talked to that they don't want it narrowed to two lanes. At numerous public meetings,
29 all of which I have attended, all of them, Staff has repeated that in order for the City to get the
30 \$1.2 million from the VTA they had to change the lanes. That was part of the requirement of
31 getting the grant, but they haven't really taken the citizens or the residents in the area who live
32 there every day into consideration. Why, I ask is the City going to spend an additional half a
33 million dollars of the citizens' hard money for a project that a large segment of the California
34 Avenue community neither wants nor has requested. Specifically we believe narrowing the two
35 lanes will produce more traffic congestion, less convenience for customers who want to shop and
36 spend money in Palo Alto, and even create a greater bicycle hazard since both cars and bikes will
37 have to share the same exact lane.
38

39 We are also concerned about parked vehicles on the street who now will be forced to back up
40 right into the only traffic lane that they have on the street creating an increased danger for cars
41 and bikes going down the street. As a result, we feel that this is an ill-conceived project,
42 ignoring the wishes of a large segment of the California Avenue community, and it should be
43 rejected or severely modified by the Planning Commission. We hope you will take a good listen
44 to the community, especially those that live on the street. Thank you.
45

1 Chair Tuma: Thank you. Excuse me I think Terry one of the Commissioners has a question for
2 you.

3
4 Commissioner Keller: So was your statement an official position of the Palo Alto Central
5 Homeowners Association or ...? When you said 'we' I was just wonder exactly what the scope
6 of 'we' was.

7
8 Mr. Holzemer: Yes, I am here representing the majority of our Board. Yes.

9
10 Commissioner Keller: Okay, thank you.

11
12 Chair Tuma: I think there is one more question for you, if you don't mind. Commissioner
13 Garber.

14
15 Commissioner Garber: There is. I had another question for you. You had mentioned that the
16 only thing – the only thing that I heard you say that your Board wanted was the repavement of
17 the street. Is there anything else?

18
19 Mr. Holzemer: Well, we talked about in the early City meetings that we liked some of the
20 concept ideas. I think Jaime mentioned I am sure in his presentation about the signs out on front
21 of El Camino Real, and drawing attention to California Avenue. I think he talked about some of
22 the other street improvements. I think those would be great ideas, and I think they would be very
23 welcome by the business community. I think the primary sticking point is the four lanes to two
24 lanes.

25
26 Commissioner Garber: Thank you.

27
28 Chair Tuma: Thank you. Our next speaker is Cedric De La Beaujardiere followed by Fred
29 Balin. I apologize for butchering your name. We have heard that over and over. With a name
30 like mine I am used to that from my end.

31
32 Mr. Cedric De La Beaujardiere, Palo Alto: Thanks, no problem. I am here to support the Staff
33 recommendation. I support this plan. I am the current Chair of the Bicycle Advisory
34 Committee. We have reviewed the plan and it has incorporated the recommendations that we
35 made to Jaime and his team. We think that the configuration is safe for bicycles. You have 16
36 feet here, a typical bike lane is five feet. A very wide lane in a street would be 11 feet. So at 16
37 feet you have plenty of room. The charros tell the bikes and the cars where to be so it is really
38 not a problem for bikes, and the Bicycle Committee does support this plan.

39
40 As an individual I wanted to point out, and as part of PABAC too, the lane reductions are safer
41 for pedestrians. The number one cause of vehicle/pedestrian conflicts is when a pedestrian
42 crosses a road with more than one lane in each direction. So at the mid-block crossings, which
43 are not controlled by any stop sign having a reduction in lanes is a great improvement for safety
44 for pedestrians, as well as having them be raised crosswalks. It will slow down the cars.

45

1 As an individual I would like to point out then that this plan adds between ten to 19 parking spots
2 on street depending on what the options are. So you have a net increase in parking that is good
3 for businesses, that is going to draw people in. You have the pedestrian safety improvements
4 that will help draw people in. The street is going to get repaved anyway. This is an opportunity
5 to change the striping. The four lane configuration is an anachronism from 70 years ago from
6 before Oregon Expressway was built. Now California Avenue doesn't go through the tracks any
7 more, it is totally superfluous, it is wasted space. So now we have an opportunity to update our
8 design to what the current conditions on the ground are.

9
10 The traffic volumes are extremely low on California Avenue. They are about a quarter of what
11 you get at Arastradero. So you hear a lot of people saying oh, the lane reductions on
12 Arastradero, what a pain it has been during the commute period, but you have a quarter of the
13 volume. Even at the peak hour you could double the traffic volumes in a peak hour and you
14 would still be underneath the capacity of the one lane configuration.

15
16 I wanted to add as well that one way to address one of the concerns that people have is the back
17 in parking and backing out of a steeper angle. One idea that I have been in support of is trying
18 out back in diagonal parking. You basically drive past your spot, put on your blinker and then
19 you back in. Then when you are ready to drive away it is easy to see if there is any oncoming
20 traffic. Other cities have done it to success. Just because it was mentioned, the farmer's market,
21 I have talked to people at Country Sun and they have seen a net increase in their business over a
22 week period. I have driven by enormous sales on Sunday. So, thank you very much. I support
23 this plan.

24
25 Chair Tuma: Thank you. I believe we have a question for you.

26
27 Commissioner Fineberg: Forgive me if this puts you on the spot, but do you happen to know
28 which other cities have done trials or have implemented the back in parking? If you don't maybe
29 Staff does.

30
31 Mr. De La Beaujardiere: Yes. Some of them are San Francisco, Fremont I believe has tried one,
32 and several others but I can't remember off the bat.

33
34 Mr. Rodriguez: If I can follow up to the response from Cedric. San Francisco has done that.
35 Fremont is actually in the process of a design to do their very first concept. The other back in
36 designs that I am familiar with are actually more down south, specific cities in Southern
37 California I don't remember, but more down south. It is a different concept. We are actually
38 very interested in looking at it from a Staff level to see how the experiment in Fremont goes. It
39 is a little bit more applicable to what we could do in Palo Alto versus what San Francisco has
40 done just because of the nature of the city.

41
42 Chair Tuma: Thank you. Fred Balin followed by Roger Carpenter.

43
44 Mr. Fred Balin, Palo Alto: Good evening. First of all I want to congratulate the Planning
45 Department for achieving this grant. It is a superior concept integration and presentation to the

1 grant application of last spring as well as the one in 2006 from the Public Works Department and
2 the area association.

3
4 Moving on though to some of the substance. It was mentioned tonight that your purview here is
5 on the environmental review and the CIP. However, you have not really had a chance to look at
6 the elements of the project. I think that is something we should think about if this comes around
7 again. There are two concepts that were kind of dictated a large portion of what happened here.
8 Number one is, as was mentioned earlier, the grant was dependent upon the lane reduction from
9 four to two. It took awhile to get that out there but Staff states that is the case. You would not
10 have gotten the grant or been considered without that.

11
12 The second thing, which is on the other side of that is when you move to two lanes the decision
13 was made we are going to have a three foot paver, a kind of a no mans land, between the cars
14 and the wider, 16 foot bike lane. Certainly safer for bicyclists if they share the now wider lane
15 with the cars, but that takes away the possibility of widening the sidewalk in a uniform way,
16 which was discussed at the Planning Commission here when we were talking about the trees last
17 year. In the rush to get the trees in that was kind of put aside. I think that that discussion should
18 have occurred here as well as with the public before this went through but in the rush it didn't
19 occur. There is a concern that this street is narrow. It needs to be thought about as we go
20 forward. I am also concerned about filling it up with a lot of bike racks as well, and we need to
21 make good use of the bulb-outs and other options in the project to not make that street too
22 difficult and to make it more inviting for people to stroll on.

23
24 In terms of the environmental study we have a number of elements that we kind of haven't heard
25 from before. In addition to the standard signalized intersection Level of Service we now have
26 like a mid-block intersection LOS. We have queuing analysis, link level stuff. Interesting
27 parameters. More than we have had before. I am thinking ahead and although there is no major
28 impacts here as represented there will be a decrease in road capacity. It will be less than half the
29 road capacity. There is an increase in delay time. There is the whole issue of queuing where if
30 things queue up too far it affects parking spaces, and therefore you had to make an adjustment
31 for that. As you go forward into the Comprehensive Plan I don't know what kind of threshold
32 levels we have set in terms of transportation. There was a long period of time where we didn't
33 have any set. Something may have been set in certain areas, and I think we might even be able
34 to look at that as almost like a backstop and say if these are the levels that we want not the worst
35 case scenario or something that is as bad as we can tolerate, but something that we might want to
36 have we might want to think about that as we go forward in the Comprehensive Plan for this
37 area.

38
39 Finally, there is a section here on the CIP tonight. You are supposed to approve some kind of
40 exception to the process. I would kind of ask for you to understand exactly what is involved in
41 that exception because one of the chances that we missed in terms of stopping what happened on
42 California Avenue with the trees was that there was the CIP, the mid-year adjustment was not
43 made public so we couldn't really find out that the trees were going to go down through that
44 process. so I would just alert your attention to what the exception is tonight. Thank you.

1 Chair Tuma: Mr. Balin, if I may just to clarify something for you and for the public, and I think
2 it was my comment you were referring to earlier about the purview. The plan is that if this does
3 goes forward that there will be a year-long design process in which the Planning Commission
4 will be intimately involved. So it will go through public discussions, it will go to the ARB, it
5 will go to the Planning Commission, and go back to City Council. So by no means is tonight our
6 only swing at bat. I didn't want anybody, including the Commissioners, to interpret my
7 comments as that we are not allowed to talk about those items tonight, but we are not here to
8 approve a design tonight. That was just to clarify my comment.
9

10 Mr. Balin: Just a follow up. My comment is that the constraints of the design as have been
11 presented in the proposal, the City Council had to sign a Resolution that said that the project will
12 be implemented as is, and therefore where there is latitude within design I believe you still can
13 do things. But where it is firmly stated I think there is less possibility.
14

15 Chair Tuma: Great, thanks. Roger Carpenter followed by our last speaker, Jed Black.
16

17 Mr. Roger Carpenter, Palo Alto: Hi. I am member of the Evergreen Park Neighborhood
18 Association. I would like to say that I approve all of the plans that I have seen in the previous
19 meetings as well as tonight.
20

21 I believe California Avenue improvements in aesthetics and the additional community space that
22 will come out of this plan will only be beneficial to the community. I completely agree with one
23 lane of traffic in each direction. It is not a through street and there is very little traffic, and the
24 analysis shows that there won't be any impact. So I am looking forward to ironing out any
25 details with the community, if this is approved, over the next year. I believe the plan in place
26 looks good and all that is left are very small details.
27

28 All correspondence that I have seen at Evergreen Park Neighborhood Association has been
29 positive towards these improvements. I have seen no negative comments from any of the
30 correspondence. That's it.
31

32 Chair Tuma: Thank you. Our last speaker, Jed Black.
33

34 Mr. Jed Black, Palo Alto: I am a resident of the Evergreen Park Neighborhood, about California
35 Avenue North. I have been there for 20 years. I am very in favor of the Staff's recommendation
36 to approve the Negative Declaration. I think a key aspect from my perspective is the reduction
37 from two lanes to one in with the analysis that has been conducted that suggested that it should
38 have minimal impact on congestion.
39

40 We see other areas that have been revitalized that have been mentioned like Castro Street, Santa
41 Cruz Avenue, and University Avenue. Great places and highly trafficked and great for business.
42 The nice aspect about this project in reduction to one lane is there shouldn't be the congestion it
43 sounds like that the other places are encountering. But nonetheless they are still great places, and
44 I don't think that what has been done for those areas has had a negative impact on business at all.
45 It makes that a great positive impact on business and I could see the same thing potentially
46 happening to California Avenue. So just voicing my support as well. Thank you.

1
2 Chair Tuma: Great. Thank you. If there aren't any other members of the public who want to
3 address this item? Okay, we will come back to the Commission then. Commissioners, we will
4 do questions and comments together in a round and see if we can get through it there. Then at
5 any point in the process if someone is prepared for a motion I would be happy to entertain that. I
6 had lights from Commissioners Garber, Keller, and then Fineberg. We will do five minutes each
7 on the first go around and see if we can get through it.
8

9 Commissioner Garber: Jaime, you had mentioned in your presentation that one of the factors
10 that would have a big impact on the volume of traffic on California Avenue is if it were open at
11 the other end, meaning that it was connecting to secondary streets such that there would be
12 greater flow. Correct? Are there other or perhaps I could ask you to just spend a moment to tell
13 me what other key things might happen on that street or on any street that would have a big
14 impact. I am thinking 2X sorts of impacts on the volumes of the street other than just simply
15 opening the easterly end back up to Alma or something of that sort.
16

17 Mr. Rodriguez: It is actually a really good question. What we were mentioning during the
18 presentation was if you were to connect California Avenue to the other side of Alma that
19 additional vehicle traffic would of course be a much different study than we have done today.
20 But, there are other things that can lead to increases in traffic. That is of course changes in land
21 use, which this Commission has purview to, and if there were – and I will just use the most
22 extreme example I can think of off the top of my head, say a re-conversion of Mollie Stone's to
23 some other type of a development, maybe more residential. That would be more traffic. Every
24 project that would be proposed would involve some type of environmental analysis like we've
25 got. So when those projects would be designed or be planned they would do an additional
26 analysis to figure out what type of traffic it would add to the street, and what those Level of
27 Service impacts specifically at the intersection level what it would result in.
28

29 Commissioner Garber: I am going to interrupt you just briefly because I have limited time. So
30 changes in land use that increase density.
31

32 Mr. Rodriguez: That is correct.
33

34 Commissioner Garber: Let me paint two wild scenarios for you.
35

36 Mr. Rodriguez: Sure.
37

38 Commissioner Garber: What would happen say if there was a hotel at the corner of Park and
39 California? Let's just assume that nothing else changes it is added somehow magically on top of
40 all that. The hotel, just for arguments sake, is 150 rooms. That is probably a lot. Or
41 alternatively for instance like on Castro, which has a Performing Arts Center with a significant
42 amount of parking underneath it, let's say that you plopped a Performing Arts Center at the end
43 of California Avenue. How would that change, and I recognize I am putting you on the spot
44 because you have not done this analysis which would take nine months or whatever, but would
45 that have a significant impact on the CEQA recommendations that you are presenting to us this
46 evening?

1
2 Mr. Rodriguez: Yes, if we were looking at those types of land use changes it would be a much
3 different study than we have done today. We would have much more volume along the street. A
4 typical example, and I will ask Bret to correct me any time I say anything wrong, but a typical
5 residential unit is about ten trips average per day. That is a couple in the morning, people going
6 to work, there are maybe a couple of mid-afternoon trips, then another couple of trips coming
7 home in the evening. So when we do that analysis, you mentioned a 150 room hotel, we would
8 look anywhere between say – I am just going to throw a number out, 125 trips during a peak
9 hour. So if you look at the volumes that we were showing on our slide and you added 150
10 during those peaks you might see the Level of Service drop from B to probably a C, but you
11 probably still won't get anywhere near a D or an E, anything that would be by CEQA considered
12 a significant impact.

13
14 Commissioner Garber: Thank you.

15
16 Mr. Rodriguez: I want to clarify also for the Performing Arts Center if that type of analysis were
17 to be conducted we would actually look at the periods when the events would likely be
18 occurring, and conduct more data during those planned times. So a Performing Arts Center may
19 not see an impact during say the lunch hour but you would definitely have an increase during the
20 PM peak period or later say to the seven o'clock time when activities are occurring. So I would
21 say a Performing Arts Center would have less of an impact than say a hotel that would have
22 traffic all day long.

23
24 Commissioner Garber: Thank you. What I am hearing here is just in this little mind experiment
25 that we have done is that even though there would be significant impacts they would likely be
26 less than significant relative to the conclusions that the current CEQA study has presented to us.

27
28 Mr. Rodriguez: That is correct.

29
30 Commissioner Garber: Thank you.

31
32 Chair Tuma: I want to ask a follow up to that before we go onto the next Commissioner. A little
33 slightly more concrete and less abstract, we are concurrently reviewing California Avenue Area
34 Plan that has sort of three different levels of intensity if you will, status quo, more, and then more
35 than that. Has Staff done any thinking about or analysis with respect to whether, along the same
36 lines of what Commissioner Garber was asking, whether at the most intense of those
37 developments whether that would create again the same question, something greater than a
38 significant impact for CEQA purposes? Again, I know it is a bit of an unfair question but it is
39 something that we are all studying and looking at now. So I think we want to address it at this
40 stage.

41
42 Mr. Williams: Actually, I don't think it is an unfair question. I think it is a very fair question
43 and it is something that we talked about pretty extensively. There is a paragraph at the bottom of
44 page 7 of the Staff Report that talks about it and gives two examples, California Avenue and
45 Birch Street, and California Avenue and Ash. Sort of what would it take to actually reach a
46 Level of Service D, which is theoretically acceptable. We would prefer not to go there at those

1 intersections. It shows that a tremendous number of vehicles that would have to be there in that
2 peak hour, nearly double the existing number. So if you take all the traffic that is coming there
3 now you would have to have that much more traffic, and we just don't think that the
4 intensification of the California Avenue Concept Plan area would result in that. Once you take
5 that and when we do get to that point of having a plan to analyze we will be looking at where
6 those cars go, and a lot of them are not even going to use California Avenue in some of the areas
7 if they are not proximate to it. A lot of folks today don't use California Avenue itself they will
8 use Sherman or Cambridge rather than stopping along California Avenue. So there are a lot of
9 different routing things to look at as well as the different uses have different peak periods that
10 they generate traffic. So we did talk through that. We talked about trying to maybe do some
11 analysis for every one of those intersections and how much more. It was clear that some of them
12 would take ten times as much traffic as currently exists, but it was at like a minimum 76 percent
13 or 80 percent increase over the existing volumes at that peak hour to even get us down to the
14 Level of Service D let alone E, which is unacceptable.

15
16 Chair Tuma: Great, thanks very much. Commissioner Keller followed by Commissioner
17 Fineberg.

18
19 Commissioner Keller: Thank you. First I appreciate my fellow Commissioner Garber talking
20 about the potential for the Performing Arts garage with it and hotel, to save me the trouble of
21 asking those questions.

22
23 So my first question is did we get this grant in part because California Avenue was designated a
24 priority development area? Did that get us points? If it had not been designated a priority
25 development area would that mean that we would be less likely or perhaps wouldn't get the
26 grant?

27
28 Mr. Rodriguez: Yes. In order to actually be considered for the grant you actually need to be
29 within one of those zones or immediately adjacent to some type of a transit station, which
30 California Avenue falls under. So it was one of the primary reasons why this project was well
31 received.

32
33 Commissioner Keller: Thank you. So another quick comment just in passing is when you do the
34 urban design of how this works I hope you study the issue of newspaper racks and media racks
35 and such, and the proliferation of those on California Avenue and figure out how to do a better
36 design for that.

37
38 Did the traffic analysis study the impact of the 45 degree angled parking, which I think is a
39 steeper parking. It is steeper with respect to the flow of traffic, of that on the traffic flow. Did
40 the traffic flow study the nature of the parking and the effects of that parking on the traffic flow?

41
42 Mr. Rodriguez: I will try and answer the question and then I will let Bret follow us if he has any
43 additional comments. When we asked Hexagon to look at the concept plan we specifically said
44 for most of the corridor we came up with 60 degrees because that is what helps us maximize the
45 parking availability on the street. Really, one of the reasons why that was done is because we are

1 trying to comply with our own City standards regarding parking dimensions and parking depths
2 and widths.

3
4 One of the changes that I should note that we did make in this plan very early on as a result of
5 some of the community input was we originally had an eight foot wide parking [redacted] to
6 maximize it even more. Much of the community said that is too narrow, go at least eight and
7 half. That is how we got to where we did. So when Hexagon didn't specifically look at is 45
8 better than 60 throughout the corridor because we complied with our City standards. They
9 looked at 45 from the standpoint of where don't you comply with City standards if you do 60,
10 and that is how the recommendations came up to make those changes down near Park Boulevard
11 East and Park Boulevard West, as long as the one area for the optional plaza near Ash Street.

12
13 Commissioner Keller: Is there currently a speeding problem on this segment of California
14 Avenue? What would be the effect of the traffic speeds of changing to this configuration?

15
16 Mr. Rodriguez: That is a really good question and I am going to go off memory here. No, there
17 is not speeding problem. Most of the data that we collected shows speeds anywhere between 20
18 to 25 miles per hour. So speeding was not so much an issue. One of the reasons why this project
19 recommended the raised mid-block crosswalks that are shown in the plan is because narrowing
20 down to one lane, which is a little bit more wider, more comfortable for traveling and sharing
21 between a vehicle and a bicyclist we didn't want it to result in a speed increase either. So those
22 mid-block speed table will help to make sure that that issue is addressed. We wanted to make
23 sure we planned versus react with this project. That is how the recommendation was made.

24
25 Commissioner Keller: Thank you. Was there conversations with the farmer's market and
26 festivals that are there like the To Life Festival and the impact of what is being proposed on
27 these?

28
29 Mr. Rodriguez: We never specifically outreached to say the farmer's market association other
30 than we wanted to plan for trying to enhance that facility by introducing the concept of that plaza
31 near Ash Street.

32
33 One of the things we threw out to the community, but it wasn't well received, was we thought
34 maybe we could look at doing a weekend long closure, Friday night to Sunday morning. But it
35 was not well received so it was not studied as part of the traffic analysis.

36
37 Commissioner Keller: Thank you. I have seen loading the median in California Avenue by
38 Birch. I have seen in the evening a truck adjacent to that in the eastbound direction leaving the
39 right lane free in order to use that as a loading zone if you will. This is like nine or ten o'clock at
40 night. I am wondering what they are loading to but I notice the truck there occasionally. Do you
41 know what the effect would be on that of this proposal, and are you aware that that's
42 occasionally used as an impromptu loading zone?

43
44 Mr. Rodriguez: That is a really good question. It is actually something that we discussed with
45 both the business community as well as the regular community during all the meeting processes
46 we had in September and August. We actually introduced two loading zones within this project

1 one near Park Boulevard West and another one near Birch if I am correct without looking at the
2 plan again. When we had the discussion the merchants were originally asking for more, which is
3 why the first two were introduced. Then later on other merchants said well, we have our loading
4 zones on the little alleys behind our buildings so we don't really need more. We didn't pull out
5 what we proposed either, so we left those in. So I don't know what people are doing at nine
6 o'clock at nighttime to unload to, but the design would definitely not allow for loading within the
7 mid street because there would be one lane. So could you move around? You probably could.
8 It is really the equivalent of almost a 19-foot lane if you consider that band. So if there were a
9 vehicle stopped someone could move around. It shouldn't result in a bottleneck congestion but
10 would not be a preferred action by a motorist.

11
12 Commissioner Keller: Thank you. If I can just ask one more question if I may?

13
14 Chair Tuma: Okay, and are you going to want to go again in another round?

15
16 Commissioner Keller: This is basically it. This is to ask, I guess we have our City Economic
17 Development Manager. So I figured I would take the opportunity to ask if you have any
18 impressions. I realize you probably have not done a formal study but if you have any
19 impressions on what the effect of this change would be on the business community. I notice we
20 are always afraid of change. So I wonder if you have knowledge or experience in what the
21 nature of this change is that happened elsewhere, and whether it would be a positive for the
22 business around the area.

23
24 Chair Tuma: Could you state your name for the record.

25
26 Mr. Thomas Fehrenbach, Economic Development Manager: My name is Tom A. Fehrenbach. I
27 am the Economic Development Manager for the City. There are two elements of this plan that
28 are really exciting from an economic development perspective. They are adding parking and
29 adding a sense of place making. I think both of those things tend to attract more business, and
30 people tend to stay longer, and hopefully spend money in more than just one shop. So as the
31 Economic Development Manager and as a former merchant along University Avenue I can tell
32 you that those two items are very impressive in terms of economic development.

33
34 Commissioner Keller: I am wondering if you were here when Castro Street in Mountain View
35 kind of made its change.

36
37 Mr. Fehrenbach: I was not although my predecessor did do some outreach to Los Gatos as well
38 as Mountain View and Menlo Park. Basically, although there was in fact some community
39 resistance to going from four lanes to two, overwhelmingly afterwards the consensus was that it
40 was a great change and that it was good for business. I believe there is a report in the packet
41 somewhere that has that data. I am not sure if it made it into this.

42
43 Mr. Rodriguez: I am sorry, the study that Tom is referring to is online on the California Avenue
44 website. I don't think it was actually in your packet. If you want it we can make sure that Zariah
45 forwards it to all of you tomorrow morning.

46

1 Commissioner Keller: Great, thank you. thank you very much.
2
3 Mr. Fehrenbach: Welcome.
4
5 Chair Tuma: Thank you.
6
7 Mr. Williams: Chair? I just wanted to add to that. I certainly agree with what Mr. Fehrenbach
8 said. I think we do have to be and will take a lot of time during the design process, be cognizant
9 of the construction period impacts on businesses. This is a major project and clearly there is a
10 potential for having disruption there that will affect the businesses. So I think it will behoove us
11 to spend much time in terms of trying to find ways to minimize those impacts whether it is the
12 way we phase things or being sure that entrances are kept clear, and that kind of thing. We will
13 pay attention to that.
14
15 Chair Tuma: Thank you. Commissioner Fineberg followed by Martinez.
16
17 Commissioner Fineberg: One quick housekeeping matter. This photo was given to us at our
18 places. Who gave it to us? Why do we have it? What does it mean to us?
19
20 Chair Tuma: I will take that. It is a prop. It is a photo that I took and I will explain it later.
21
22 Commissioner Fineberg: Okay, never mind. Let me start with my higher level issues.
23 Following up on Commissioner Garber and Chair Tuma's question of our analysis of a Negative
24 Declaration while there is also an area plan and a Comprehensive Plan Update going on, I would
25 like to ask that question by saying is this a segmented review? If not, why not?
26
27 Mr. Williams: We don't think it is. This is something that the City has been working on for
28 some time now in terms of looking at California Avenue and the streetscape and that before we
29 were doing the concept plan. We believe that also it does essentially stand on its own. It would
30 be very speculative to wait until the other plans are done. Again, we have looked at the issue of
31 is this perhaps constraining the concept plan in particular in terms of future development
32 intensity on the road. We think that it is a project that will help stimulate the area whether it is
33 part of that longer effort, or if that doesn't come to fruition in the short term, immediate term, as
34 well. So it does stand on its own very well. It has been underway for sometime now, and we
35 don't think that it has to necessarily be tied to the other projects.
36
37 Commissioner Fineberg: Okay. I appreciate your answer but I remain unsure how to evaluate
38 the Negative Declaration in view of our next item tonight, without going into detail, is talking
39 about two months from now – not even two months – in February of 2011 we are going to have a
40 Vision Statement of what happens in our priority development areas. It has these charts with
41 potential areas, California Avenue being one of them, with densities literally hundreds of units an
42 acre. So if we are concurrently visioning an area a block away with what I consider incredible
43 densities, and our instructions in that exercise are to suspend reality and just plan as a vision, and
44 then three months later you introduce reality and constraints. I don't understand how we can do
45 that and create environmental documents on both. So I remain troubled by that.
46

1 Chair Tuma: Commissioner Fineberg, I think one of your fellow Commissioners has some
2 thoughts on that. Commissioner Garber.

3
4 Commissioner Garber: Thank you. On the heels of your concern there I wanted to ask Staff, if
5 memory serves the CEQA process, what the City has before it right at the moment is a proposed
6 project, which is the California Avenue Transit Hub project. The visioning exercise is not a
7 project per se it is a planning exercise. Then relative to the area plan, that is again a plan as
8 opposed to a specific project, is that one of the distinctions between how the CEQA process is
9 utilized?

10
11 Mr. Williams: Yes, I think it is. It is again, what you are referring to and hundreds of units per
12 acre is not our proposal. It is not in the PDA. It is not the way PDA has been characterized from
13 us to ABAG. If they come out with something down the road that is that kind of intensity, it is a
14 little hard for me to believe that the City is going to support that. But we can't operate on this
15 project and wait and see, which is in my estimation going to be years as to what those numbers
16 are that are sort of theoretical and thrown out on a regional basis. It is not going to be I don't
17 think that specific to here that we can take any of what is out there right now and assume that
18 that is going to happen. So I think cities if they looked at it from that perspective everybody
19 would stop everything they are doing right now and wait around for a few years and see what
20 comes out of this process, and I don't think that is realistic. We do have a set specific project in
21 front of us. We have something in the way of a concept plan that provides some parameters to
22 start thinking about what intensification, what direction it might go, and some of the levels. So
23 we have thought about that in this analysis. Going beyond that if there were to be some much,
24 much higher intensity that was proposed at some point in this long-range planning process is we
25 think just too speculative to address. I think Julie wants to add.

26
27 Ms. Julie Caporgno, Chief Planning Official: I just want to add that I think with the concept plan
28 for both the higher density scenarios we had been assuming the two-lane street. Admittedly we
29 haven't done the traffic analysis yet. It is going to be done in a model run, but given the
30 information that Jaime has prepared and his traffic consultant has prepared at this level, which is
31 probably much more of a intense analysis for that street. We don't anticipate that any sort of
32 development that would be proposed to date which has been under consideration for the concept
33 plan would have any significant impacts on the two-lane versus four-lane street pattern.

34
35 I think the other thing that you would have realize is that if there is something in the future that
36 somebody proposes some enormously high-density project the City would have the ability to
37 reject that based on there is insufficient capacity in the street system. I don't think that two-lane
38 versus four-lane on that one little area is probably going to make that big of a difference. It is
39 probably going to be generally overall in the area.

40
41 Then the final thing, which we mention in the Staff Report, is that any residential development
42 that goes in there the whole concept for that would hopefully be that it is transit oriented, and
43 that there would be less trips generated from that development. So given all those factors we just
44 don't see that changing from four lanes to two lanes will be significant as far as providing
45 capacity for future residential development.

1 Commissioner Fineberg: Okay, thank you. So I agree with Commissioner Garber's comment
2 that the visioning exercise is not a project and will not have standalone CEQA review. Again, I
3 am trying not to muddy this item with the next item on our agenda, but assuming that some
4 theoretical pieces of that visioning exercise feed into the concept plan and the Comprehensive
5 Plan that will incorporate the California Avenue Concept Plan then the Comprehensive Plan is a
6 project and does have environmental review. We don't know what direction it is going. I
7 understand both Mr. Williams and Ms. Caporgno have used the phrase 'we don't anticipate' and
8 'we don't think,' but if you have two concurrent projects going on does best guess count for
9 CEQA review? You are the experts. I have said enough on that one.

10
11 The next question I have, should I go this round or do I need to come back? Okay.

12
13 Chair Tuma: We are trying to get through this in one round because it is almost nine o'clock.

14
15 Commissioner Fineberg: Okay. This is another big one and then my others are super quick. I
16 have some questions about why we are being asked to establish a new CIP account. This has
17 been going around for awhile. I understand there was the old CIP account that included the
18 fiasco with the trees. Why are we being asked midstream to establish a new CIP for this project?

19
20
21 Mr. Rodriguez: I will do my best to answer that question. The current CIP, the City does have
22 an active CIP for California Avenue. It was a CIP set up by the Engineering Department. That
23 project funded more some initial plan developments that were done for some of the previous
24 grant [REDACTED] that were put into the City. It funded some of the design work for the fountain
25 that is currently kind of going through the Public Art Commission process. But it never had
26 funding for the level of construction or design that is being proposed at this level. So the new
27 CIP that is being recommended is actually a CIP out of the Planning Department and was put
28 together with the exact recommendations or engineers estimates for the project before you.

29
30 Mr. Williams: I would also point out that if the design that Public Works had done before had
31 resulted in a grant they would have had to established a new CIP project for the construction of
32 the project. So that was just as mentioned kind of a design preliminary analysis type of a CIP
33 analysis. It was not the hard concrete and construction component.

34
35 Commissioner Fineberg: Is it typical though when there is a grant that a new CIP account is
36 established midstream, or had and I will lay the blame on my shoulders too, had I thought on our
37 last cycle that hey, do we need a new CIP account? We have known there has been knowledge
38 that this has been around for quite awhile. I am just wondering should something have triggered
39 creating the new CIP account in our normal last round?

40
41 Mr. Williams: I don't think so. You already had a design CIP there, and so we were working off
42 of that and have been. You would have to have either assumed that there was going to be a grant
43 approved or assumed that the City was ready to commit \$1.8 million to a project to put the CIP
44 in. Just to give you a little parallel the last CIP you will recall, I think it was the last one and not
45 the one before, had the funding in it of about \$100,000 for the ped/bike bridge over 101. That
46 was a design feasibility study. So if we ultimately turn that into a real project, which would take

1 a grant definitely, we would end up with another CIP that was for the construction of that
2 project.

3
4 Commissioner Fineberg: Okay, let me rattle through my quick questions.

5
6 Chair Tuma: We need to give everybody a fair opportunity to have their time. We are again,
7 based on some of the things that we talked about this weekend at our Retreat, we are trying to
8 keep things on track.

9
10 Commissioner Fineberg: Okay, pass.

11
12 Chair Tuma: Thanks. Commissioner Martinez followed by Tanaka.

13
14 Commissioner Martinez: As one of the advocates of trying to be quick I think I am going to take
15 more time than I am allocated. I want to talk about the urban design aspects of the project
16 because I think it is kind of manifold and I share some of Commissioner Fineberg's concern
17 about other things that we are not talking about tonight. Also use it to sort of give my little
18 primer on urban design.

19
20 Urban design was sort of born post-war as everybody knows, with the flight of residents to the
21 suburbs, and our downtowns sort of collapsed. We tried beautification projects to bring
22 businesses back with great mall projects like Fresno and Santa Monica and Sacramento. We all
23 know those and they all failed. Beautification doesn't really work to bring businesses back. We
24 have smaller examples right on California Avenue, the beautification project of the 1980s. It
25 didn't really do much for California Avenue either. So I think we need to move beyond thinking
26 that, as an architect beautification is great, but I don't think we should be arguing that this going
27 to stimulate business or bring people there.

28
29 The second aspect, and I think the project is really right on on this, urban design is really the
30 connectivity, making streets safer, making traffic flow better, and I think the project does a good
31 job of that. That is a real important part of what this project is about. I think we didn't
32 emphasize the safety aspect of that enough. I think there is a lot of it in terms of slowing traffic,
33 because I think two lanes of wide open space is going to let traffic go a little faster. Having one
34 lane with bicycles right there and diagonal parking on the side, I think we are really going to
35 make the street safer for both cars and pedestrians and bicycles. So it is a great urban design
36 aspect of the project.

37
38 The third and the most important, and I think the one Commissioner Fineberg was alluding to
39 was land use. We can say that Castro Street really has done this remarkable revitalization but it
40 was land use. Because before the street changes to two lanes it was all Chinese restaurants if you
41 can remember, and business were really a lot worse off than California Avenue. With the change
42 it wasn't just making the street narrower and the sidewalks wider it was bringing in the
43 Performance Art Center and the other things that Commissioner Garber mentioned. So land use
44 has to be an important component of this when it comes around in our discussion. The street
45 infrastructure is an important one.

1 The last one, and I think I am going to get it in my five minutes, is relatively new, and that is
2 sustainability. I don't think we could overemphasize how important not just walkability, but the
3 climate protection goals we have, urban forest, the use of permeable materials. I think
4 Commissioner Garber mentioned maintenance, making sure we are not replacing things all the
5 time. This is really an important newer urban design goal. I think it should be considered as we
6 go forward with the design aspect, then beautification, and the connectivity, and the street
7 improvements, and land use, and sustainability. They are all working together as really the urban
8 design of California Avenue. Thank you.

9
10 Chair Tuma: Thank you. Commissioner Tanaka followed by Lippert.

11
12 Commissioner Tanaka: First I would like to thank Staff for the work and for winning the grant.
13 I think that is great. Thank you for all the comments from the public. I appreciate you coming
14 out this late evening.

15
16 I have a few questions for Tommy. Can Tommy go to the mike? Basically, one of the
17 comments that I heard is that a lot of the businesses were against this. I understand that you
18 actually talked to a lot of the businesses. I was wondering if you could share your experience.

19
20 Mr. Fehrenbach: With special thanks to **Feta Bishop** who unfortunately is not here tonight. She
21 is the President of the California Avenue Area Development Association. We were able to get
22 some businesses to attend many of the meetings, especially the last meeting that we had, as well
23 as to put the actual plans and the project in a few places along California Avenue for people to
24 come on their own time and view the plans. Basically, we received many comments via email
25 from those folks.

26
27 I talked to folks both for and against the project. I think there was nothing substantive that you
28 didn't hear tonight in terms of the arguments for and against. I can say that I believe that Feta
29 did a great job of helping to get the merchants involved and get the information to them.

30
31 Commissioner Tanaka: Okay, great. Thank you. I don't know if this is a question for you or for
32 Jaime, but I have read somewhere and this is probably appropriate for areas where there is
33 limited real estate like San Francisco perhaps or maybe areas where real estate is very expensive
34 like Palo Alto, that each parking space costs something like \$100,000. Do you have any idea of
35 how much does a parking spot right on the street in front of a business, how much is that worth
36 generally?

37
38 Mr. Rodriguez: I would probably say that your best reference is the parking space within a
39 parking structure is a garage. So within a price range of about \$40,000 to \$50,000 per space that
40 is what we would probably use. I would say conservatively it is probably closer to about
41 \$40,000 on the low end if you want to just go with a low number.

42
43 Commissioner Tanaka: What about if it is on the street?

44
45 Mr. Rodriguez: That is what I would assign a value to because that is what it would take to build
46 it somewhere else.

1
2 Commissioner Tanaka: Okay. I see.

3
4 Mr. Rodriguez: You can't take away a building to add more space on the street so you have to
5 look at the price on private property in this case, and that would be parking garage.

6
7 Commissioner Tanaka: So if you have 17 more spots. Let's say 17 times \$50,000 that is...?

8
9 Mr. Rodriguez: That is about \$850,000.

10
11 Commissioner Tanaka: So by getting 17 more spots we are basically adding about \$800,000 to
12 \$900,000 to this project.

13
14 Mr. Rodriguez: That is right. Actually, one of the things I did want to mention, I am sorry to cut
15 you off, Commissioner Tanaka, is that we are undergoing a separate, completely parallel parking
16 analysis of both the California Avenue business districts as well as the Downtown University
17 Avenue Parking Districts. We are going to look at exactly what we did on California Avenue for
18 every street within those districts. We are going to look at first how can we reconfigure every
19 parking street, every loading zone, every red curb zone to try and maximize parking within those
20 districts. So we can maximize available on street parking before we look at trying to build more
21 parking structures off street at a more costly rate. So that is something that we are going to be
22 kicking off probably in February right when I come back from paternity leave. Curtis is actively
23 helping hire a Parking Manager in my absence.

24
25 Commissioner Tanaka: Okay, so basically if I do the math in my head for \$500,000 the City gets
26 \$1.8 million of improvements, plus \$800,000 worth of parking spaces. So \$1.8 plus \$800,000 is
27 \$2.6 million. So for half a million dollars we get \$2.6 million injected into California Avenue.

28
29 Tommy, just to ask you real quick, does that seem like that would help? I understand the land
30 use issues, but does that seem to help in your opinion as an informed business owner on
31 University and experienced Economic Development Manager? How would that impact the area
32 for the businesses?

33
34 Mr. Fehrenbach: Certainly adding parking is a big help. Sense of place making tends to attract
35 folks, or attract folks that are already coming to the area to stay longer and hopefully spend more
36 money. So certainly.

37
38 Commissioner Tanaka: That is all for the questions for you, Tommy. Actually I have a few
39 other questions but I am running out of time. Can I ask the Chair to indulge me to run through
40 the rest of these?

41
42 Mr. Rodriguez: Commissioner Tanaka, I just want to add on to some of Tommy's comments.
43 Tommy and I have had a lot of discussions about what can we do to make sure that economic
44 development occurs within California Avenue with this project. We have bounced around ideas
45 in between the two of us. One of the things we thought about is as we are beginning construction
46 of this project and we are nearing this end we want to make sure people know that we made

1 these improvements. We thought what can we do. We had some very simple ideas as far as
2 working with the search engines such as Yahoo, such as Google, to set up banners so that if you
3 were to do a search within our community much like you would do today you would have a pop
4 up specific to Palo Alto to say come visit California Avenue. Something that promotes in simple
5 ways people to visit our community and promote some of the improvements that we built into
6 the street. So that is just some of the things that we talked about that we definitely want to
7 pursue and develop further as this project moves forward.
8

9 Commissioner Tanaka: Okay. Jaime, in your opinion is there a possibility to do a trial?
10

11 Mr. Rodriguez: I think it would not be a well-developed trial. I am just being honest. I will use
12 the example of Arastradero for better or worse. That trial was done in the right way. The slurry
13 seal that happened with that particular street covered up any of the old markings that were there,
14 provided a fresh clean look to the street. That is something that can't be done today because
15 California Avenue needs to be resurfaced. That is something that the merchants have said, the
16 residents have said. That actually is a true statement. Much of California Avenue has
17 completely failed as far as the pavement goes. We are very fortunate that this grant will actually
18 cover a majority of that resurfacing cost for us by converting those existing asphalt parking bays
19 to concrete decorative bays that will have much more longevity life than we would get out of
20 asphalt. So if it is implemented today not having had those other improvements in place it may
21 not be a good comparison as to what it would look like in the future with the improvements that
22 are proposed.
23

24 I am going to ask Bret if he is familiar with any type of an improvement like this done as a trial
25 anywhere else. I can't think of a one.
26

27 Commissioner Tanaka: Okay, I understand. So you mentioned we have the amount to repave.
28 How would it have cost to repave the whole street?
29

30 Mr. Rodriguez: I didn't pull the specific up, I am just going off experience. Just looking at
31 California Avenue today if it was going to get resurfaced at about 60-plus feet wide curb-to-curb,
32 from El Camino down to the Caltrain station I would estimate about \$1.2 to \$1.4 million. What
33 it will cost us now with just a 30-foot section down the street I would probably guess more
34 around \$500,000 to \$600,000. A significant difference.
35

36 Commissioner Tanaka: Okay, so with the reduced asphalt then every ten years or whatever, 20
37 years, we are going to save an additional half a million dollars.
38

39 Mr. Rodriguez: That is right.
40

41 Commissioner Tanaka: Okay.
42

43 Chair Tuma: Commissioner Tanaka, we are going to get to a motion. People will have an
44 opportunity to speak to the motion. We do again need to try to respect everybody's time. So I
45 am going to ask that unless there is something of critical urgency that we move on.
46

1 Commissioner Tanaka: Okay, I will pass then. Thank you.

2
3 Chair Tuma: Thanks. Commissioner Lippert.

4
5 Vice-Chair Lippert: First I would like to begin by complimenting Staff. I think you did a really
6 great job with your consultant in terms of the report. I think it is very clear. I find it very easy to
7 support the Staff recommendation here as well as the Negative Declaration.

8
9 I just want to make a couple of comments. First of all, I concur with Commissioner Keller in
10 terms of there are trucks that are parking in the median at night to do off-loading. I have
11 witnessed it eating at the Counter. They do park there while they have their trucks, their hand
12 trucks, or whatever.

13
14 With regard to Level of Service I am quite impressed with the study that was done in terms of
15 the Level of Service and the A Level of Service. I want to point out for the general public that
16 those are not letter grades as in you got in elementary school, A, B, C, D, E in terms of failing.
17 What they really are is it talks about capacity, road capacity, and how intersections are handling
18 traffic. A C level does not mean that you are satisfactory in terms of passing a class. What I find
19 very disconcerting I guess about the numbers is when you look at the road segment link numbers
20 an A or B level of service, well if you are merchant you want slower traffic. You want cars to
21 slow down and observe what is going on in the way of commercial stores there. Otherwise, what
22 happens is people wiz by your store and then they have to double around the block again in order
23 to find it, which is a problem. Having the parking there I think actually assists because what
24 happens is that the cars will back up into the street and begin to slow traffic down so that it gives
25 people that are going there an opportunity to find where stores are, where certain merchants are.
26 It is a way finding measure. So if there was some way of actually creating more of a C Level of
27 Service, and maybe that will happen with density.

28
29 I am very encouraged by the increase in parking. I think that is a general improvement. I go to
30 California Avenue on my bicycle. I go to California Avenue driving. Generally what I wind up
31 doing is if we are going to the Counter or some other restaurant there I let my wife off and I have
32 good karma in finding a parking space after I drop her off. I usually find a parking space
33 immediately afterwards, but 90 percent of the time I end up going around the block to the back
34 and having to park in the surface lots there. What I think is important here though is in terms of
35 where your crosswalks are aligning those crosswalks with the connectivity to the rear surface
36 parking lots at mid-block in particular.

37
38 I think that what we are going to begin to see is with a graying or an aging population there are a
39 couple of things. Number one, the necessity, or the need for handicap parking. I see that with
40 my mother. We are always looking for disabled parking spaces. To have the right on California
41 Avenue actually makes it much easier for older folks and disabled individuals from having to
42 come from the parking lots in the rear. Then to also locate those near pedestrian crosswalks also
43 helps those people tremendously.

44
45 **MOTION**

1 So with that I would like to make a motion. My motion is to recommend approval of the
2 proposed Negative Declaration for California Avenue's streetscape project, and to recommend a
3 Capital Improvement Program to fund the project improvements.
4

5 **SECOND**
6

7 Commissioner Keller: Second.
8

9 Chair Tuma: Okay, so that is a motion by Vice-Chair Lippert, seconded by Commissioner
10 Keller. Mr. Lippert, would you like to speak to your motion?
11

12 Vice-Chair Lippert: Yes. First of all I would like to address Commissioner Fineberg's concern
13 with regard to there not being a CIP element yet for this project. The CIP is forward looking and
14 this project isn't going to be built until 2012. So really the upcoming CIP can incorporate and
15 can contain this project. Even though we are looking at in piecemeal and we are beginning this
16 process now those numbers will be incorporated in the upcoming CIP for 2011-2012 and 2012-
17 2013, correct?
18

19 Mr. Rodriguez: What we will actually recommend to the Council is a mid-year budget
20 adjustment to create a brand new project out of the infrastructure reserve so that we can fund the
21 project. It is actually a very important thing to do, because if we had to wait until the five-year
22 process was complete or the mid-year process was completed we would actually not
23 be able to start design in the March timeframe as we would like to do today. We opted to take
24 the grant funding in February of 2012 versus this year because we wanted to not be constrained
25 by Caltrans guidelines for the acceptance of the funds through the design stage. So we purposely
26 fund the design now through the local match and asked for the construction funding later so that
27 we wouldn't have to go through the local or disabled business enterprise process that
28 construction requires through the Caltrans document process. Although we do something like
29 that already on our own we didn't want to be constrained by Caltrans. Does that make sense?
30

31 Vice-Chair Lippert: It does. So I think that moving forward with this is particularly important
32 especially since we have started putting in the trees, and those are going to begin to mature. This
33 is really the second phase of that.
34

35 The second comment I would like to make is with regard to a comment that my colleague,
36 Commissioner Martinez, made. There are adequate examples out there, I think probably Santa
37 Cruz Avenue in Menlo Park, you look at Castro Street in Mountain View, you look at University
38 Avenue in terms of the improvements that were done there. Those have greatly improved each
39 of those shopping districts tremendously. The most impressive I think right now is probably
40 Menlo Park which managed to get a whole bunch of merchants from Stanford Shopping Center
41 to move to Menlo Park. They are eating our lunch because they did their street improvements.
42 Well, we need to do something about that here in Palo Alto. One of the things that we can do is
43 to put in a series of street improvements along California Avenue.
44

45 Then the last point that I would like to make is with regard to California Avenue and the whole
46 issue of narrowing the road there. This is not an arterial. This is not like Middlefield Road.

1 This is not like Alma Street. You are not going down these streets to get through Palo Alto to
2 another destination. These are not arterial roads. This is really a shopping district road. If
3 anything California Avenue is another shopping center. So as such it needs to be a destination.
4 If you look at it, it is a piece of punctuation, it is an exclamation point if anything. It is a way to
5 get from the transit hub to El Camino Real and do it in a pedestrian way. Thank you.
6

7 Chair Tuma: As the seconder of the motion, Commissioner Keller, do you have some additional
8 comments?
9

10 Commissioner Keller: Yes. So let me make a couple of observations. Firstly, in terms of the
11 CIP I assume that part of this is a credit accounting mechanism so that the money the City spends
12 on the project now can be counted towards the match as matching funds. By creating a separate
13 accounting mechanism you can sort of more easily do that. So you have to create a fund account
14 and the CIP is the way of doing that.
15

16 So firstly let me make the observation that if you look at Figures 5, 6, and 7 of this Hexagon
17 report I did the math. I did the math for cars traveling along California Avenue and for
18 pedestrians and bicyclists traveling along California Avenue at the Birch Street intersection. It
19 turns out that other than in the morning, in the AM where probably not very many pedestrians
20 hang out there during AM rush hours. It turns out that there are more pedestrians crossing Birch
21 Street at California Avenue than there are cars crossing Birch Street at California Avenue. In
22 fact, there are almost double the number. In fact in the direction from the train tracks to El
23 Camino there is more than double, almost triple, the number of pedestrians walking in that
24 direction as cars in that direction. So what this tells me is that this is a street that is pedestrian
25 driven as opposed to car driven. So what this means to me is that what we need to do is increase
26 the ability of people to walk here because that is where the major mode of transportation is
27 walking in this area.
28

29 As somebody who comes to this neighborhood reasonably often I am forever fearful of going on
30 the mid-block crosswalks across California Avenue with four lanes of traffic. Now, when I
31 moved to Palo Alto originally in 1977 pedestrians could step off the foot of the curb and traffic
32 would magically screech to a halt. Unfortunately too many New Yorkers like me have come
33 here and that no longer happens. I think that in order to make that happen again narrowing
34 California Avenue into one lane in each direction will allow pedestrians to go from store to store,
35 crossing the street, and make it a much more pedestrian friendly streetscape. I believe that that
36 will increase the shoppability of California Avenue because it is really daunting now to think of
37 it as this big thoroughfare that is keeping people from crossing.
38

39 Also, if you look at Figure 5 the Existing Peak Hour Traffic Volumes, it turns out at the core
40 intersection of Birch and California Avenue more cars are heading off of Oregon Expressway,
41 taking Birch Street to the intersection of California Avenue than are driving on California
42 Avenue in either direction. So that is an interesting combination. So that Birch Street traffic is
43 really where people are coming and hopefully we want more of them to stay awhile on California
44 Avenue and shop there, and go there.
45

1 I think that what you will probably wind up with is that fewer people will try to use that as a cut-
2 through to avoid the intersection of El Camino and Oregon Expressway/Page Mill Road. So we
3 will see that as being a more friendly area because of that – people will avoid using the cut-
4 through on California Avenue.

5
6 So I think this will actually make it into a safer – it will certainly make it safer. It will certainly
7 make it more pedestrian friendly. I think that has the potential to be more business friendly. I
8 would like to see us do things like were done on Castro Street and think about the potential for a
9 hotel and Performing Arts Center, and also think about the potential for having more parking
10 spaces associated with that. I think that coupled with what we are doing on California Avenue
11 will really revitalize the California Avenue, just as was done with the combination in Mountain
12 View. Thank you.

13
14 Chair Tuma: I have a couple of quick comments and observations. So California Avenue is a
15 place where I go almost every day and I see the traffic. I walk the area. I walk over to
16 Starbucks. I am around there quite a bit. It doesn't surprise me at all the results of the traffic
17 study. There is not a lot of car traffic on California Avenue on a day-to-day basis, in and out.
18 There are some good congestion points and sort of thing.

19
20 So one of the objections I heard tonight was this is going to create traffic congestion. I think that
21 is a fear, sort of a – but I don't see any data that supports that. In fact, all the data that we see
22 through these studies is not only is there more than enough if you cut it in half, but even if you
23 cut it down to two lanes there is still double the capacity that we need. So the notion that this is
24 going to cause traffic congestion for automobiles just doesn't resonate for me.

25
26 The notion that this is going to somehow be hazardous to bicycles I simply don't see that. I think
27 what we heard tonight from what I would consider bicycle experts, people who have dedicated a
28 lot of time and effort and focus to making bicycling safer, and those people are telling me that
29 these are great improvements for that front.

30
31 There is a real issue I think around peak hours, in particular the lunch hours for people having
32 the opportunity to be able to go to California Avenue at lunch hour. There are not enough
33 parking spaces, and there are a bunch of good places to go. So what do you do? Well, you can
34 spend \$50,000 a parking space and building more parking spaces. That is awfully expensive.
35 We are going to get 17 more parking spaces. But the other thing you can do is encourage more
36 bicyclists to go there for lunchtime. It just so happened today I was over at AOL. AOL has a
37 wonderful bike program that you see a picture of here in their lobby, in several places throughout
38 their lobby. They have a free loaner program. So you can come as an employee of AOL, you
39 come downstairs, you give them your badge, you sign out the bike, and off you go. I spoke with
40 the woman behind the desk who does this, the security person. She says she signs out 20 to 25
41 bikes a day. I asked if she had any idea where people were going. She said well, it is mostly
42 going down to California Avenue to have lunch. Isn't that interesting? So for almost no
43 additional dollars we get 20 to 25 people from one single employer going down to California
44 Avenue to drive additional business to the district. I happen to run into two people who were
45 coming back from lunch. There was one gentleman and there was another woman who was with
46 him. I asked what do you think? They said, would you please give us more places to put the

1 bikes. There are not enough bike racks down there. So it is kind of unfortunate we have to put
2 these bikes or hook them up to things, so give us more racks. I asked about going back and
3 forth. They said there are some things that you could do, and this goes outside of California
4 Avenue and down to Park Boulevard where we could make that more friendly. When I think
5 about what we are talking about in terms of the Fry's area and trying to connect that up to
6 California Avenue, the connectivity, so making this area more bicycle friendly makes a lot of
7 sense to me.

8
9 So this is a project that would give us more parking spaces, up to what I heard to be 100 bike
10 spaces. So if we could create 75 to 100 trips a day from neighboring businesses. I think also I
11 have heard that Facebook and there are other progressive, responsible business who are
12 providing bikes to their employees to go out to lunch. Well, we are not going to get more
13 parking spaces down there in these quantities for this amount of money. So I think it is terrific.

14
15 The whole sense of place that Mr. Fehrenbach spoke about makes a huge difference in terms of
16 people wanting to be there. So I think to further what he had said about economic development I
17 see this as a huge boon to economic development for California Avenue.

18
19 I do think we have to address this issue about cars backing out into one lane instead of two. I
20 think that can be taken care of in terms of design. So I have yet to hear sort of a real
21 showstopper of an issue backed up by concrete data that says we shouldn't do this. I see all these
22 reasons to say that we should. I think we need to do more things to encourage progressive
23 companies like AOL and others to have these types of programs. But wow, what a great way to
24 drive business down to this business district at almost no cost. The employers are willing to do it
25 so we need to facilitate that. So those are my thoughts. Obviously I am going to be supportive
26 of the motion. Commissioner Fineberg.

27
28 Commissioner Fineberg: I am going to be supportive of this motion also and would echo pretty
29 much everything Chair Tuma just said. This project is in its early state accomplishes a lot of
30 good things that are consistent with our existing Comprehensive Plan. It will create a more
31 human scale. It will be more pedestrian friendly and safer. So those are two big things all by
32 themselves.

33
34 It also kind of rights a wrong that right now the street – this was referenced by I believe a
35 member of the public earlier. The street now is laid out as a legacy from the 1950s, two lanes in
36 each direction and big old cars barreling down fast through a retail district. It isn't that
37 environment anymore. So we have a great opportunity to turn it into a little village. Little
38 villages have little streets. It slows things down. It makes it safer. It makes things more
39 accessible. So all good things.

40
41 Tonight there were mentioned a number of significant design issues that your plate is going to be
42 full of finding solutions for. One that was mentioned before was the problem of the cars backing
43 up. Another, excuse me for referencing another Commissioner's comment is people that are
44 going to want to park and let out loved ones. Another will be I think I heard it being called
45 people trolling for parking spaces. They stop at the end of an entry area and wait for someone to
46 leave, or see someone leaving and then effectively park blocking traffic for three minutes while

1 the car loads up. You have enforcement mechanisms and other tools that you can use to deal
2 with those and resolve those.

3
4 So there aren't any significant considerations that give me heartburn except for the growth that
5 will happen in the surrounding area, and we just don't know what it is. We are
6 contemporaneously doing the area plan and we don't know what those densities are. We don't
7 know what the traffic generated will be. We don't know what the increased population will be.
8 We don't know what the square footage of office space will be. We just don't know what we are
9 building one block away. I still have heartburn about that. Other than that I think you need to
10 work out all the bugs and we are definitely going the right direction.

11
12 As far as the CIP my questions earlier were not that I object to it. So I am perfectly supportive of
13 creating a new CIP account. I asked my questions so if there were any learnings for us to be able
14 to anticipate for the future so that we don't have to do midcourse budget adjustments. I think
15 that would be better. That I don't think is any reason not to proceed. Thank you.

16
17 Chair Tuma: Commissioner Tanaka.

18
19 Commissioner Tanaka: Thank you. So overall it seems like spending half a million dollars to
20 get \$2.6 million of immediate benefit plus another half million dollars of annuity of savings
21 seems pretty compelling. So I want to thank Staff for bringing this project forward.

22
23 I note that there are concerns about we have the concept plan running in parallel to this program.
24 I wanted to ask the Planning Director in regards to what stage will this concept plan be done by
25 the time we actually start construction on this streetscape concept.

26
27 Mr. Williams: Well, hopefully the concept plan would have been approved by the Commission
28 and Council in a sort of tentative stage that would be then undergoing the environmental analysis
29 along with the rest of the Comprehensive Plan and the EIR that will be done for that. So the
30 concept plan itself by sometime later this year should be drafted or sort of accepted for the
31 environmental review details, and then it may be adjusted after that or may stay the same.

32
33 Commissioner Tanaka: Okay, so largely the concept plan will be done before the shovel hits the
34 ground on this project.

35
36 Mr. Williams: Right.

37
38 Commissioner Tanaka: Okay. I realize a lot of what we are contemplating for the concept plan
39 is increased density, but just based on your gut feel here because I know there is no analysis that
40 could be done at this point, would the parking for that increased density go on California Avenue
41 or potentially would you encourage it to go on the side streets?

42
43 Mr. Rodriguez: I will take a stab at that question first. Once the concept plan for California
44 Avenue is completed and the land uses are identified, the changes if any, a separate traffic
45 analysis will be completed in much more different detail than what we have done. It will look at
46 where the development occurs and where the likely trip generation will be. We will work with

1 that transportation consultant when they are on board through that process to say take 15 percent
2 of the planned trips and put them on this street because that is more likely, put 30 percent here,
3 and put 20 percent there. That is analysis that has yet to occur because the concept really isn't
4 ready yet.

5
6 Commissioner Tanaka: Okay. Some of the design issues that members of public brought up like
7 for instance wider sidewalks, perhaps back in parking, perhaps even routing shuttles on Oregon
8 instead of California Avenue, those would be taken care of during the design phase.

9
10 Mr. Rodriguez: That is right. Actually we will take care of a lot of the questions. Actually, one
11 that came up during the community meeting process that we didn't talk about tonight is lighting.
12 What we are going to do during the design process is we are going to ask our design consultants
13 to look at adding pedestrian scale lighting to California Avenue. It isn't something that is funded
14 as part of the grant. I have to make that really clear. We are very fortunate that we are still in a
15 very good construction environment where bid pricing is still very low. I actually expect the
16 same to occur through the design process. So we want to have probably as an alternate item
17 during the design for construction additions of additional lighting on the street. We probably
18 won't change out the existing but just add lighting to be more cost conservative or cost savings
19 wise.

20
21 Commissioner Tanaka: Great, thank you.

22
23 Chair Tuma: Okay, with that Commissioners are we ready to vote? All right. All those in favor
24 of the motion signify by saying aye. (ayes) All those opposed? That passes unanimously seven
25 to zero. Thank you.
26

Traffic Calming has Positive Economic Effects on Small Businesses and Property Values

The proposed redesign of Massachusetts Avenue incorporates many "traffic calming" elements such as: pedestrian bump-outs, cross-walks, landscaping, addition of bike lanes and the reconfiguration of vehicle lanes. The goal of traffic calming is to encourage multiple types of transportation (car, bike, walk and bus) and improve the **safety** and "livability" of a neighborhood for all users. What sometimes gets overlooked is that safer, pedestrian-friendly neighborhoods are also the types of places where people want to shop, dine-out and own a home. In short, **traffic calming improves the economic bottom line for local businesses**. Many communities across the country have engaged or are planning to engage in similar traffic-calming projects as a way of revitalizing local businesses and residential property values.

One example is Valencia Street in San Francisco. They used to have a **road similar** [see p. 5] in design to Massachusetts Avenue in East Arlington with two vehicle lanes going in either direction. Around the year 2000, the street was redesigned to include bike lanes and reconfigure the vehicle lanes to one vehicle lane in either direction with a shared turning lane in the middle. Prior to the project, many small business owners were skeptical of the redesign. As part of this **study**, conducted four years after the traffic calming project was completed, these same business owners were polled to assess how they felt about the redesign of Valencia Street. The results were striking:

66% of the merchants believe that the bike lanes have had a generally positive impact on their business and/or sales;

37% of merchants reported that the bike lanes have **increased** their sales;

73% of merchants thought that the bike lanes have made the **street more attractive;**

not one merchant reported that the bike lanes had made conditions "worse";

and 46% reported that **reduced auto speed was a good condition for business.**

This **report**, funded by the State of California and the U.S. Government, surveyed the results of traffic calming projects in communities across the country. A few highlights from the report:

A 1999 study by the **Urban Land Institute of four new pedestrian-friendly communities determined that home-buyers were willing to pay a \$20,000 premium** for homes in them compared to similar houses in surrounding areas;

Another study showed that a 5 to 10 mph reduction in traffic speeds **increased adjacent residential property values by roughly 20%;**

Walk-ability and bike-ability attract customers: Vermont is known for its pedestrian-friendly communities. **In 1992, an estimated 32,500 visiting cyclists spent \$13.1 million in Vermont** – about twice the amount of money generated by Vermont's maple syrup producers in a good year;

Following its traffic-calming redesign, the city of Lodi, CA credits the pedestrian improvements, as well as economic development incentives, with the 60 new businesses, the **drop in the vacancy rate from 18% to 6%**, and the **30% increase in downtown sales tax revenue** since work was completed in 1997.

Nationwide, many communities are now undertaking traffic calming projects similar to the type proposed for Mass. Ave. **The PBS News Hour** recently did a story [bottom of page] on how St. Louis plans to use traffic calming measures to revitalize its downtown, currently "dominated by speeding cars and the occasional endangered pedestrian."

Posted by cmckenzie | July 25th, 2009 | Category: Uncategorized | Leave a comment

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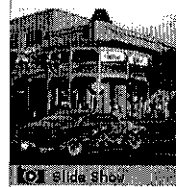
Mill Avenue Tempe, Arizona

Urban Oasis Fuels Revitalization and Commerce

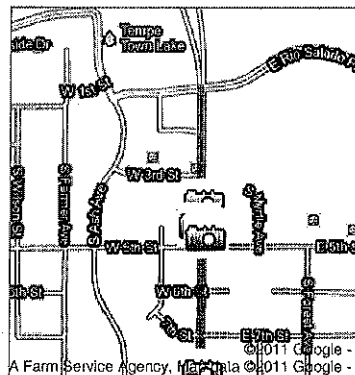
During the past 130 years, Tempe, Arizona's Mill Avenue has evolved into an eclectic, urban oasis. There's no mistaking the street's authentic sense of place that embraces both the past and future: remnants of adobe and timber enclosures of early Mexican-Americans stand next to brick and milled-wood buildings of the territorial pioneers and the contemporary architecture of today's development.

Named one of the American Planning Association's 2008 Great Streets in America, Mill Avenue demonstrates how public- and private-sector commitment, a willingness to take risks, and a dedication to community design and historic preservation create a place of lasting value.

Today the seven blocks of Mill Avenue designated as an APA Great Street, between the Rio Salado River on the north to University Drive on the south, are the heart and soul of downtown Tempe. The street supports a workforce of more than 9,000 and hosts 2 million visitors annually. Due in large part to the avenue's pedestrian scale, the city has developed a national reputation for excellence in hosting major sporting and cultural events — including the Insight/Fiesta Bowl Block Party, considered one of the nation's top 10 New Year's Eve parties.



The historic Mill Avenue Bridge, constructed in 1931, provides a dramatic sense of arrival into the city for the 19,000 vehicles and 13,000 pedestrians that daily traverse the roadway. Light rail will bring thousands more each day to Mill Avenue starting in December.



View larger Tempe, Arizona map


Other changes to Mill Avenue have come from two streetscape programs. One in 1987 widened brick sidewalks and added street trees and thematic lighting to encourage pedestrian activity and social interaction. In 2004 the street's four lanes were reduced to two in order to calm traffic and accommodate bike paths and on-street parking.

More than 3 million square feet of new retail, restaurant, office, and residential space has been built along the street during the past quarter century. Annual sales in the city have skyrocketed from \$12 million to \$160 million, providing Tempe with more than a 50-to-1 return on its investment.

The Mill Avenue experience today is far different from that of the 1970s and before. Suburbanization and the resulting urban disinvestment of the 1950s and 1960s hit Mill Avenue hard. Many community leaders favored the wholesale demolition of the district while others backed a hands-off approach. Eventually the city commissioned a group of local planners and architects, the Par 3 Group, to study Mill Avenue and its environs. The resulting plan, adopted by the city council, sought not only to revitalize the street but to preserve historic buildings and enhance the pedestrian experience.

The 1968 decision to locate the strikingly modern Municipal Building near Mill Avenue signaled local officials' commitment to the area. Five years later it was bolstered with the establishment of a redevelopment effort that directed planning resources and earmarked funding for the area.

The commitment of Don Hull, city community development director, to the street's redevelopment and appointment of planner Dave Fackler to lead implementation were critical to the street's rebirth.



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
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Despite its transformation during the last three decades, Mill Avenue is poised for potentially even greater changes because it links Tempe's compact downtown with two rapidly growing areas — the Rio Salado Project and Tempe Town Lake to the north and Arizona State University to the south. Within a square mile of Mill Avenue, more than \$2 billion in new development is planned. To ensure that new development complements Mill Avenue's sense of place, Tempe recently finalized *The Urban Open Space Development Plan* and has adopted community design principles for the downtown and Mill Avenue District that were recommended in the city's *General Plan 2030*.

"More than a street, Mill Avenue is a city room" where some events are planned and others happen spontaneously, says Mark C. Vinson, AICP, Tempe's city architect and community design director. "What continues to draw people to Mill Avenue is the sense of the unexpected, that creative spirit that wafts through the community."

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PLANETIZEN

Road Diets: Making Streets Slim Down Is Good For Pedestrians, Businesses And Even Traffic

14 June 2010 - 10:58am

Author: [Michael Bohn](#)

Cities are greatly in need of slimming down their roads, says architect Michael Bohn. A recent project in Long Beach, California shows how curb extensions and street furniture can have a huge impact on the economics of downtowns.

Humans are not the only ones needing a diet these days. More and more cities are putting their streets on a diet – reducing vehicle lanes to add pedestrian space and calm traffic. New York City's recent success in closing an entire section of Times Square to traffic is the most famous example. But the real news is how quickly and effectively it can happen even on a fairly small scale in any city or town.

The other news is that, besides the benefits road diets give to pedestrians and business that thrive on foot traffic, in some cases even traffic congestion is – surprise – improved as well.



Long Beach, California is implementing a series of road diets that prove just how well they can work. Among these is a project unveiled in late 2009 at First Street and Linden Avenue in the East Village Arts District. Studio One Eleven, my firm, worked with the city to design curb extensions at this intersection. These "bulb-out" extensions of the sidewalk reduce the curb-to-curb distance – originally over 50 feet – between 40 and 60 percent, significantly lowering the exposure pedestrians face with vehicles, bringing them out past the obstructions of parked cars, street trees and street furniture. The narrower right of way on First Street has also calmed traffic, adding to pedestrian and bicycle safety and giving businesses better visibility.

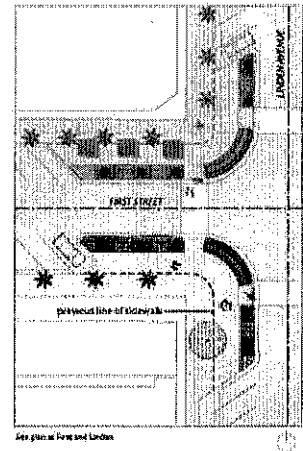
Today, these bulb-outs are fully integrated into the street infrastructure, but a prototype plan was able to test the idea temporarily, turning the experiment into a community event. The city placed large, potted plants in the street to define the pedestrian zone. An adjacent restaurant expanded its outdoor seating into this new area of the "sidewalk" (at this point it was actually still part of the street). And an information kiosk was installed to explain the concept of the curb extensions.

It is taken for granted among some planners that enhancing pedestrian mobility can also enhance business activity, but the results in this case were dramatic: The restaurant achieved the highest receipt sales in its 10-year history.

The new, permanent curb extensions at First Street and Linden Avenue expand the pedestrian realm over 3,000 square feet, the size of two average coffee shops or a medium-sized restaurant. Besides outdoor dining, there is

now room for landscaping (using drought-tolerant plants), street furniture such as benches, sidewalk paving patterns, and trash receptacles. Businesses use the expanded sidewalk for additional bike racks and outdoor sales displays. The extra space has cleared existing sidewalk area for thorough movement while expanding and making prominent the outdoor activity at these businesses.

This human-scaled design is perhaps the most important advantage of a well-planned road diet: The First and Linden curb extensions have contributed to the increased vitality of Long Beach's East Village Arts District, with business owners, customers and local residents enjoying a sense of place that harmonizes with the energetic vibe of retail and community destinations. More than ever, the neighborhood is a civilized place where pedestrians and bicyclists are easy to spot, coffee drinkers can people watch, and shoppers are inclined to linger.



But what about the ability of curb extensions to actually facilitate traffic flow? It seems counter-intuitive, as bulb-outs purposefully slow down cars and often eliminate right-turn lanes. Those who advocate traffic diets believe it is more important for pedestrians to cross safely than for cars to get through an intersection. However, the shorter distance that results from curb extensions on each side of a street means the average pedestrian spends at least four seconds less time when crossing the street (based on the Manual on Uniform Traffic Control Devices average walking speed of 4 feet per second). The irony is that the reduced time necessary for walkers to cross the street can provide more time for cars to pass, partially compensating for the loss of a right-turn lane. In other words, everybody wins: Cars get maintained traffic flow and pedestrians get safer crossings.

Other road diet plans also carry this double benefit. For example, car lanes can be reduced without necessarily reducing the number of cars they move. To maximize traffic capacity, engineers typically fit as many automobile lanes as possible, leaving a relatively narrow border on each side for sidewalks and (in some cases) on-street parking. This sometimes results in an even number of lanes, eliminating a dedicated left-turn lane. This means there must be restrictions placed on left-turn movement, as the left-most lane must do double duty as a left-turn lane and a throughway lane. Because the shared lane is obstructed whenever a left-turning car is waiting for an opening to cross traffic, left turns are often limited to non-peak hours.

When a road diet is applied to a road with at least four lanes overall, it often removes one lane in each direction. The space made available by eliminating these two lanes can be used for creating a dedicated left-turn lane, as well as sidewalks, parkways, bike lanes, or a dedicated right-turn lane. Surprisingly, eliminating one through-lane in each direction does not result in a proportional loss of car-carrying capacity, and the addition of a dedicated left-turn lane (and sometimes a dedicated right-turn lane as well) helps reduce congestion. Adding turn lanes in this manner can also decrease accidents, because it results in fewer lane changes and better visibility for on-coming traffic. All of these benefits are useful in explaining road diets to skeptical traffic engineers, or reluctant business or community members.

My firm is working with Long Beach to add curb extensions and other road diets throughout the city. These include narrowing streets adding curbside parking and bike lanes, and creating protected bike roadways between car parking and the sidewalk.

The addition of curbside parking is important particularly in parking-impacted areas. At a cost of \$8-12k per stall when a new surface parking lot is built, curbside parking is almost a freebie. For example, another Long Beach road-diet project (on Livingston Drive) will add 32 parking stalls in a mid-density residential neighborhood, with the only cost for these stalls being paint to restripe the street. From a retail perspective having curbside parking in front of a shop can increase retail sales by thousands of dollars while at the same time serve as a buffer to pedestrians using the sidewalk from moving vehicles.

Many of these changes are the result of Long Beach's Livable Community agenda, which enjoys broad support from Long Beach's City Council and is a top priority for its city manager. In 2009 the city hired Mobility

Coordinator Charlie Gandy – a nationally prominent bicycling proponent – to implement many of these plans.

According to **Streetsblog Los Angeles**, which closely follows pedestrian, public transit, bicycle and related issues, the city is concerned about the health of its residents, and for the environment. "But this is also an economic-development strategy," says writer Joe Linton. "If Long Beach is to attract and retain companies and workers, then it needs to be able to compete. The city has decided that livability will make it competitive."

In the instance of the First Street and Linden Avenue curb-extensions and the other road diets underway, that strategy is successful.

Michael Bohn, AIA, is Principal with **Studio One Eleven** an integrated practice of architecture, landscape and urban design, based in Long Beach, California.

Comments

Keith - What town are you describing?

Keith,

That's a terrific success story. Is this documented anywhere? If so, I'd appreciate knowing what town it is and where I can get the write-up.

Andy Hamilton

ahamilton@americawalks.org

Success story

Andy,

In my post, I mentioned two case studies, so I don't know in which you have most interest. The first one I described is Allen Road in downtown Allen Park, MI, where the recommended reconfiguration was successfully modeled and tested, but eventually abandoned by the city. The speed/volume test is documented.

The second case is Michigan Avenue (US-12) in downtown east Dearborn, MI, where the lane reduction was implemented and later incorporated into a DOT project.

I can provide documentation for both cases. You can reach me at **krtianen@charter.net** .

-Keith Tianen

Road Diet = Crash Reduction

FHWA recently published an updated evaluation of road diet crash reductions:

<http://www.hsisinfo.org//pdf/10-053.pdf>

One interesting comment in the report: "for road diets with AADTs above approximately 20,000 vehicles, there is an increased likelihood that traffic congestion will increase to the point of diverting traffic to alternative routes." Traffic engineers are often the first to rule out road diets on such roads for exactly that reason. They are programmed to think traffic diversion is bad because it increases the volume at surrounding intersections as opposed to maximizing capacity on one primary facility.

So for those of you who live in areas that reject economic development arguments for the sake of traffic engineering, use the arguments from some of the recent FHWA sponsored and co-sponsored reports.

Road Diets, aka Lane Reduction, have economic benefits

Great post and project. I concur and offer more benefits and evidence. Lane reduction, although all but overlooked in most cases, can be the single-most cost-effective measure a business district or downtown can take to improve both business and circulation for all users, including motorists. When testing lane reduction, from 5 travel lanes and 2 parallel parking lanes to a new design for 3 lanes and 2 angled parking lanes, the new 3-lane design accommodated more vehicular traffic than the 5-lane street configuration and with no significant difference in vehicular delay. Of course, the merchants experienced a significant uptick in business. In another downtown district, the street was reduced from 7 travel lanes to 5 lanes with 2 parallel parking lanes. Although the DOT predicted dire consequences, including a 30% increase in vehicular crashes (including fatalities) and gridlock, the 6-month test revealed the opposite, as reported by the police department: a 30% decrease in all accident categories, no fatalities and no gridlock.

The reason? In both cases, average vehicular speed was significantly reduced, thereby "bunching" vehicles closer together, resulting in greater capacity per lane per hour. This dynamic improved circulation movements for all users, not just pedestrians, but vehicles as well, which experienced reduced delay for vehicular left-turns, for example.

Why is lane reduction not more common? In my opinion, because local stakeholders do not want, nor know how, to argue with the highway department, even though both admittedly have different objectives.



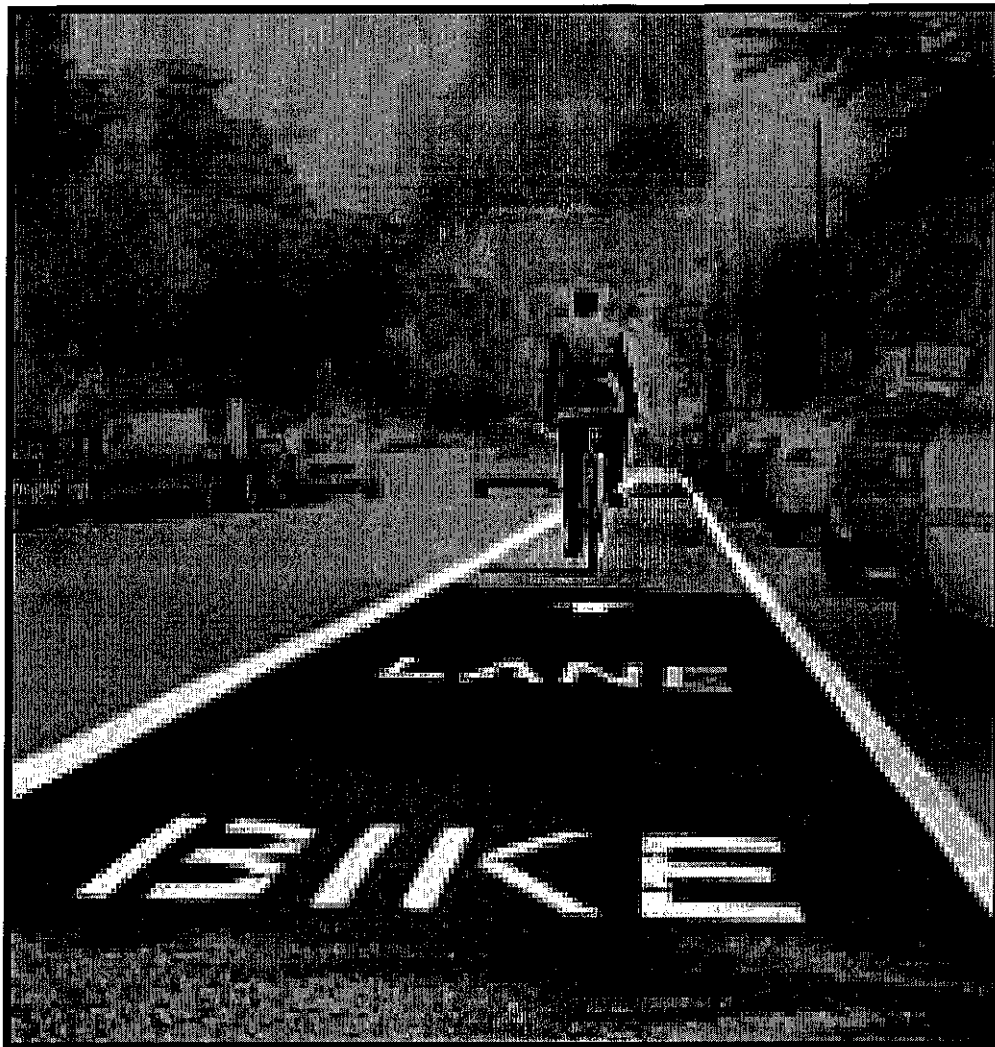
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“ *It's a supple system; standards can be adjusted to the local rural-to-urban transect by observing and measuring local types, thus identifying the community's best DNA to code for the future.* ”

[Read the full article, written by Sandy Sorlien.](#)

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Economic Effects of Traffic Calming on Urban Small Businesses

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Abstract

This study investigates how changes to the streets and sidewalks in urban areas to make them safer, more attractive, and more livable (“traffic calming”) affect retailers in highly urbanized areas. For this study, twenty-seven merchants located in the Mission District of San Francisco were interviewed about how the Valencia Street bicycle lanes have impacted their businesses. Four and a half years after the bike lanes were built, the vast majority of the interviewees expressed support for the bike lanes. Sixty-six percent of the merchants believe that the bike lanes have had a generally positive impact on their business and/or sales, and the same percentage would support more traffic calming on Valencia Street. Thirty-seven percent of merchants reported that the bike lanes have increased their sales. Seventy-three percent thought that the bike lanes have made the street more attractive. Surprising percentages of merchants reported that increased congestion (41%) and reduced auto speed (46%) were good conditions for business. On eleven of the nineteen variables, not one merchant reported that the bike lanes had made conditions “worse”, while only 6% of the overall responses were negative. Even though very few merchants thought that the bike lanes had any negative effect on their business, it should be noted that nearly all of them mentioned the importance of customer parking, and 39% felt that delivery access had worsened.

Traffic calming projects could be approved with fewer impediments, lower costs, and with more community support if transportation engineers, city planners, and advocates were able to provide more effective outreach campaigns and tools for small businesses (including empirical data showing how traffic calming measures have improved small business conditions). The results from this study will be used to develop outreach materials about traffic calming targeted to urban small businesses.

Introduction

This study investigates how changes to the streets and sidewalks in urban areas to make them safer, more attractive, and more livable (“traffic calming”) affect retailers in highly urbanized areas. Traffic calming aims to reclaim public space through engineering tools that reduce auto speed and create safer streets for pedestrians, bicyclists, transit riders, and other road users. Traffic calming began in Europe in the 1960’s and 1970’s as a fledgling concept and was introduced to a few US cities in the late 1970’s to 1980’s (Ewing, 1999). Traffic calming is part of a new movement in transportation engineering that is more multi-modal in focus (buses, bikes, pedestrians, etc.) and less auto-centric than previous engineering trends. Common traffic calming techniques and tools include speed bumps, crosswalk widening, better signals or signs, new street trees or landscaping, bike lanes, and reconfiguring or narrowing streets.

Since traffic calming is a new concept, members of the public are often wary of change. Typically, because usually 50-70% of residents must initially approve before any traffic devices are laid in the pavement (Ewing, 1999, p. 164), voiced opposition can effectively stop a traffic calming project in its tracks. Small business owners are often the most vocal opponents of traffic calming projects because of fear of lost revenue from changes to the streetscape. Small business support can be a significant factor in whether a traffic calming project is abandoned or approved.

Some research suggests that traffic calming projects can actually *improve* business conditions and raise revenues for small businesses (Lockwood, 1998). In fact, business owners in areas that have previously received traffic calming measures can become some of the most vocal champions of this work. However, business owners in areas being studied for traffic calming are often not aware of how well these measures have worked for their counterparts across town and in other jurisdictions. If transportation engineers, city planners, and advocates were able to provide more effective outreach campaigns and tools for small businesses (including empirical data showing how traffic calming measures have improved small business conditions), traffic calming projects might be approved with fewer impediments, lower costs, and with more community support.

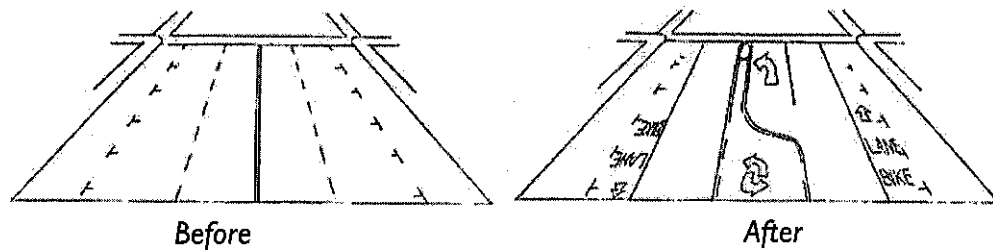
The following arguments are in favor of traffic calming from the perspective of a small business owner in an urban area:

1. Economic Revitalization and Property Values – Traffic calming can increase residential and commercial property values, which attracts wealthier residents to the area (gentrification) and can increase retail sales and bring economic revitalization to a commercial corridor.
2. Livability and Safety – Traffic calming creates more attractive environments, reduces auto speed, and increases safety for pedestrians, bicyclists, drivers, and other users of the street, which is good for business.
3. Sales and Attracting Customers – Traffic calming encourages local residents to buy in their own neighborhoods, and also attracts customers from a wider area due to reduced travel time, hassle, and cost. Traffic calming can also help people live less car-dependent lifestyles, which will increase the amount of discretionary income they can spend on things other than transportation.
4. Parking – Most businesses are concerned about the quality and quantity of customer parking and access for delivery trucks. Finding the right amount and kind of parking supply is key.
5. Impact on Employees – Poor bicycle, pedestrian, and transit conditions can harm businesses by losing worker time and productivity to gridlock, and by impairing employee recruitment. Conversely, improved transportation facilities can provide more convenience for employees.
6. Construction and Costs – Traffic calming projects often require only minimal “down time” for construction, and most do not require any investment from business owners.

Methodology of the Valencia Street Bike Lane Merchant Survey

Valencia Street is located in a dynamic part of San Francisco's Mission District, a primarily low-income, working-class, and immigrant neighborhood. The street teems with pedestrian, bus, bike, and auto activity along its length, and the vast majority of developments are mixed-use, with residential units over street-level retail. Prior to the installation of the bike lanes in March 1999, Valencia Street had two auto traffic lanes in each direction. The street was then converted into one traffic lane and bike lane in each direction, with a turning lane down the middle of the road. Curbside parking was not impacted. (See Figure 1.)

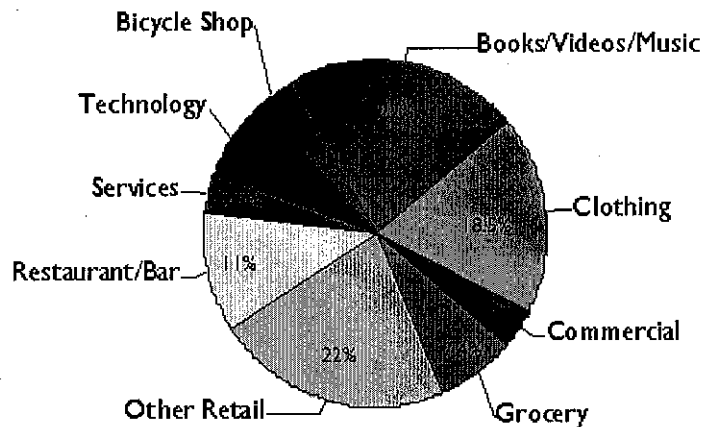
Figure 1 – Drawings of Valencia Street Before and After the Bike Lanes



Source: Sallaberry, 2000, p. 20

This case study involved administering an in-person survey instrument to gather information from selected small businesses in the service, food, or retail sectors located within the study area (Valencia Street between 15th and 25th Streets). Residential, office, industrial, and other commercial establishments were excluded from this study. Book/video/music stores, clothing stores, and stores in the “other retail” category account for nearly two-thirds of the businesses interviewed (Figure 2). The survey instrument is shown in Figure 3.

Figure 2 – Types of Businesses Interviewed



The merchants were selected through a modified random process¹ based on planning blocks assigned by the San Francisco Planning Department. An on-street census of the project area found a total of 122 eligible businesses, of which 27 were interviewed (22%) as part of this study. One owner, manager, or employee per business was interviewed; nearly 90% of the interviewees were either owners or managers, which is helpful in establishing the validity of their answers. The businesses interviewed for this study have been located on Valencia Street from a low of less than a week to a high of more than 49 years, with an average of 11.7 years. The

¹ Random selection was ensured through selecting planning blocks through use of a random number generator. In certain cases when the planning block selected did not include a business eligible for this study, nearby businesses were substituted.

interviewees have been with their businesses for between three months and 23 years, with an average of 7.6 years. The long tenures represented by these results lend validity to the responses in this survey.

Figure 3 – Valencia Street Bike Lane Merchant Survey

Date of Interview: _____
 Business Name: _____
 Business Address: _____ Cross Street: _____
 Business Type: _____
 Name of Interviewee: _____
 Title: *Owner Manager Other Employee Other*
 Number of years with business: _____
 Year business opened on Valencia St: _____

- Do you remember what your reaction was when bike lanes along Valencia Street were first proposed?
- How did the majority of the other merchants along Valencia Street felt about the bike lanes before they were built?
- What do you think the majority of the other merchants along Valencia Street think about the bike lanes now that they have been in place for 4 years?
- What were your hopes and/or concerns about the bike lanes?
- Have your views about the bike lanes changed at all since then? If so, when?
- Which of these groups, if any, affected your views of the bike lanes? *Choose all that apply:*

The Department of Parking and Traffic	The San Francisco Bicycle Coalition
Merchant Groups/Civic Organizations	Other Valencia Street Merchants
Customers/Neighbors	The Media
Other:	None
- How did these groups affect your views?
- Which of the following benefits have you seen as a result of the bike lanes? *Choose all that apply:*

Increased/Reduced economic revitalization for area	Middle lane is good for (illegal) double parking?
Increased commercial/residential property values?	More/less convenient for employees
Increased/Reduced sales	Better/Worse access for delivery trucks
Increase in shoppers who are bikers?	Reduced auto speed has increased sales?
More/Fewer walkers on sidewalks and window shopping	Increased/Decreased availability of parking for customers
New customers from outside of the neighborhood?	Construction of bike lanes was disruptive?
More/fewer area residents shopping locally	Made street safer for walkers?
Increased traffic congestion along Valencia Street-bad/good?	Made street nicer and prettier or less appealing?
Increased traffic congestion on streets nearby-bad/good?	Other:
- Apart from what the economy has done in the past few years, do you think that the bike lanes have had a generally positive or negative impact on your business' sales?
- Would you be supportive of more traffic calming (such as tree planting, sidewalk widening, and improvements for buses) on Valencia Street?
- What would you tell merchants in other areas of the city who were just learning about traffic calming efforts for their area?
- Anything else to add?

Results of the Valencia Street Bike Lane Merchant Survey

The results of the Valencia Street Bike Lane Merchant Survey are displayed in Table I. For ease of data analysis, the Valencia Street Bike Lane Merchant Survey responses were re-coded into standardized categories (where “Better” represents a situation where a variable was beneficial, “Worse” where it had a negative impact, “Balanced” where it had both positive and negative effects, “No Effect” where it had no impact, and “Don’t Know”).

Four and a half years after the bike lanes were built, the vast majority of the interviewees expressed support for the bike lanes. Sixty-five percent of the merchants believed that the bike lanes have had a generally positive impact on their business (Figure 4), and the same percentage would support more traffic calming on Valencia Street (Figure 5). Only one merchant said that the bike lanes had had a negative effect “but only very faintly so.” None were opposed to the idea of more traffic calming.

Thirty-seven percent of merchants reported that the bike lanes have increased their sales. Seventy-three percent thought that the bike lanes have made the street more attractive. Surprising percentages of merchants reported that increased congestion (41%) and reduced auto speed (46%) were good conditions for business. On eleven of the nineteen variables, not one merchant reported that the bike lanes had made conditions “worse”, while only 6% of the overall responses were negative. Even though very few merchants thought that the bike lanes had any negative effect on their business, it should be noted that nearly all of them mentioned the importance of customer parking to their businesses, and 39% felt that delivery access had worsened.

Figure 4 – General impact the bike lanes have had on interviewees’ businesses

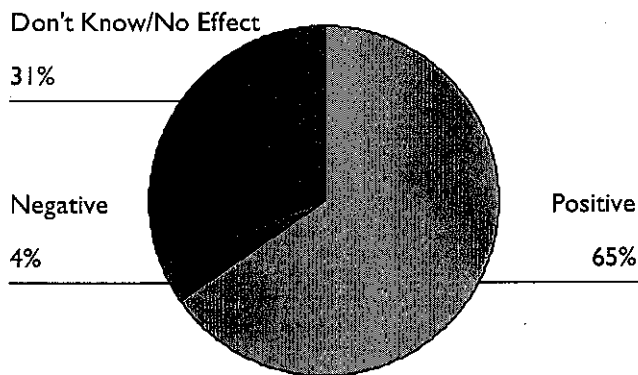


Figure 5 – Interviewees’ support for more traffic calming on Valencia Street

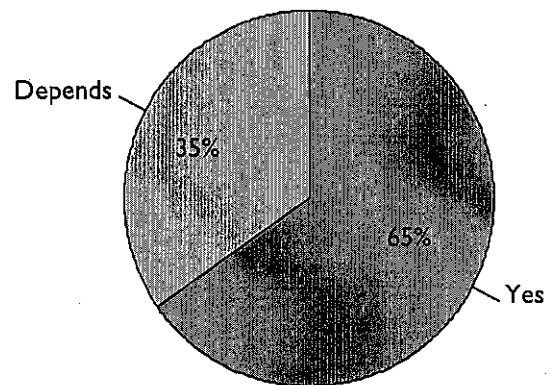


Table I – Valencia Street Bike Lane Merchant Survey: Summary of Results

Impacts of Traffic Calming	Better	Worse	Balanced	No Effect	Don't Know
Economic Revitalization and Property Values					
Economic revitalization for area	44%		4%	30%	22%
Commercial/residential property values	15%			52%	33%
Livability and Safety					
Attractiveness of street ²	73%			23%	4%
Effect of reduced auto speed on sales ²	46%	8%	4%	39%	4%
Effect of traffic congestion on Valencia Street	41%	7%	26%	22%	4%
Effect of traffic congestion on nearby streets	22%	11%		52%	15%
Pedestrian safety ²	62%			35%	4%
Sales and Attracting Customers					
Sales	37%		4%	30%	30%
Pedestrian activity	22%			63%	15%
Number of customers who ride bicycles	63%			30%	7%
Area residents shopping locally	56%		4%	33%	7%
New customers from outside the neighborhood	44%			44%	11%
Parking					
Customer parking ²	15%	12%	4%	65%	4%
Access for delivery trucks ²	35%	39%	12%	12%	4%
Use of middle traffic lane for double parking	70%	15%	7%	7%	
Impact on Employees					
Convenience for employees	67%			30%	4%
Construction and Costs					
Effect of bike lane construction on business ²		12%	12%	46%	31%
Summary Questions					
General impact on business and sales ²	65%	4%	0%	31% No Effect/Don't Know	
Supportive of more traffic calming on Valencia St. ²	65% Yes	0% No	35% Depends on the Project		

Numbers may not add to 100% due to rounding.

² For these questions, the sample size was n=26 because one merchant was unable to finish the interview due to lack of time. However, the other answers he gave were very supportive of the bike lanes.

Conclusions and Next Steps

This project focused on how traffic calming practices affect retail businesses in urban areas. The Valencia Street Bike Lanes Merchant Study found support for most of the findings in the literature for why traffic calming benefits small businesses. Specifically, a majority of the Valencia Street merchants reported that the bike lanes increased the attractiveness of the street, increased pedestrian safety, increased the numbers of customers who ride bikes, increased the number of residents who shop locally, and increased employee convenience. Merchants also strongly supported other positive impacts the bike lanes have had on businesses, although not by a majority. Some of these included increased revitalization for the area, increased sales from reduced speed, benefits from increased traffic congestion along Valencia Street, and increased numbers of customers from outside the neighborhood. Overall, two-thirds of merchants felt that the bike lanes had a generally positive effect on their sales, and also would support more traffic calming projects on Valencia Street. It is also important to note that very few merchants (no more than two merchants on any of the variables) reported that the bike lanes had any sort of overall negative impact on their business. These results definitively show strong merchant support for the bike lanes.

More extensive research into retailers' attitudes about traffic calming efforts, both before and after project implementation, would be helpful in understanding more clearly what is important to small businesses and how best to meet their unique needs. Econometric studies (especially based on annual tax receipts, assessed property values, and rents for multiple jurisdictions) could perhaps more definitively determine what benefits traffic calming brings to urban small businesses. This approach could be especially helpful for the variables that the merchants in this study were reluctant to credit the bike lanes for improving (such as property values and sales).

Outreach brochures and public presentations should be developed for an audience of urban small businesses, which should provide general information about traffic calming, information about how traffic calming has affected other merchants, and how the proposed project would specifically impact their businesses. Business owners could then use this information to make informed decisions about whether to support the project. Hopefully, information of this kind would reduce initial opposition and increase community support for traffic calming projects. This could, in turn, reduce the time and costs required for project implementation, which could then increase the number and scope of traffic calming projects a jurisdiction is able to complete. Community involvement in transportation planning could also be positively impacted.

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	Has the reduction from 4 to 2 lanes had a positive impact on the business community? (for individual businesses: on your business and/or on foot traffic)	When this change occurred, what street amenities were helpful? What street amenities would be helpful now?	Did the change increase foot traffic?	Have there been complaints or have issues arisen about the bicycle/pedestrian/vehicle interface on the street?	How has the two lane street in your district affected deliveries/circulation/buses and/or transit?	Any observations that you might like to add?
David Johnson Economic Development Manager Menlo Park	Santa Cruz Avenue used to be four lanes and is now two. The change to the current configuration transformed this “thoroughfare” designed to move traffic into one of the nicest “village character” downtowns on the peninsula. Mark Flegel (Flegel’s Fine Furnishings) was one of the civic leaders behind the project. I can provide contact information and setup a meeting. El Camino Real was six lanes between Oak Grove and Roble Avenue. It was reduced to four to the delight of many, as it helped “calm” downtown and helped alleviate the disconnect between the east and west sides of El Camino downtown.	Then, diagonal parking was added, wider sidewalks, curbside and median street trees, street furniture, new light poles, phone booths and new enthusiasm for what a downtown can be. Now, all of the amenities are dated, but it is difficult to get those that worked on the project 30 years ago to get on board. Adopting a timeless design is key here.	Yes. More importantly it created a destination.	No. However, bike lanes were not thought of at that time and they are imperative now.	Yes. All deliveries are in the back where they compete with parking plaza parkers. Scheduling is key; early morning deliveries are best. No buses on Santa Cruz Avenue.	A walking tour of downtown, lunch and a meeting with Mark Flegel seems like a good way to go. There are many parallels between Cal Ave and the old downtown MP. Findings and direction from our experience could be very helpful. As a matter of fact we are looking at the PA parking structure on Cambridge Ave in the Cal Ave district as a model of what would be an appropriate example of how to increase parking without sacrificing the charm of the village.
John Celedon Pharmacist Menlo Park	It had been 4 lanes for a very long time. Two lanes works well. Parking is an issue and they are exploring a parking structure or smart meters with a consultant that the City has hired.	These aesthetics are critical to the success of downtown merchants. An attractive district encourages people to get out of their cars and walk. Walk up traffic is required for stores to be successful.	Yes	There is always some of that. People get used to alternative ways to do things. Merchants want to invite bicycle traffic because it invites them into businesses.	Deliveries are not a problem. There is access from back parking lots and they often double park there to unload. Customers seem to understand and there don’t seem to be significant issues.	He thinks that Cal Ave is in a good position because the parking structure is in place. I explained that there is still a parking issue at some times of the day. He felt that the key is to have the area be more aesthetically pleasing to attract walkers and bicyclists. The two lane solution works for Menlo Park. He thought it could work for Cal Ave also.
Ellis Berns Economic Development Manager Mountain View	Castro St. has always been a success story in terms of narrowing the street; it was done back in the 1980’ and has proven to be successful. It is much more pedestrian oriented, has gotten people out of cars; we created on street parking and some of the parking in front of the restaurants has been converted to out door café space “flex space.” From a restaurant and to some degree retail perspective it has been incredibly successful!	We redid the entire street including all sidewalks curb gutters, created hardscape including landscape medians, benches etc. lighting etc. We also added kiosks as a way to provide people with a place to post hand bills instead of using the street light poles. This has been very effective and our parks staff removes the bills once every month.	Yes! I don’t have any hard statistics but you look at Castro St. today and you can see the pedestrians especially at lunch and in the evening hours.	Originally the street was redesign not to encourage bicycles on it. There has been some change to this attitude although, as a bicyclist I still don’t consider Castro Street bicycle friendly.	Yes, the two lanes have affected deliveries and circulation etc. Fortunately, many deliveries are done in the rear of the buildings along two public alleys. We do have other deliveries that occur on Castro St. but limited in the AM. Circulation was affected and we did think it out. Currently, we encourage people to access Castro St. by driving down Shoreline to California Street and then we try and direct them to our parking structures/lots.	Be glad to talk further with you about the narrowing of the street and impacts and even walk Castro St. so you can see the changes etc. Also, one of the underlying philosophies for Castro St., that at the same time we redeveloped City Hall, added a performing arts center, developed the transit center and strongly encouraged higher density residential around the downtown. Parking is also critical and we have been able to address parking demand by creating City-owned parking lots and parking structures as well as a Parking maintenance Assessment District and created a permit parking program.
Bill Maston Maston Architects Mountain View	Believes that it has. Grew up in MV as soon as Shoreline was built as a bypass to the downtown, it contributed to business district downfall. Quaint and two lanes because Shoreline took the traffic. Businesses on Castro Street can lease parking spaces for parking or outdoor seating. Details on curbs are different on planters, etc. Benefit for restaurant can have outdoor seating without increasing parking.	Trees placed in parking areas not on sidewalks. Planter boxes, containers at intersections were extended out to the edge of the parallel parking offering protection to pedestrians.	Initially not in 1987—based on economics of downtown (bad shape). Office and residential downtown really made the difference. Lunch office workers, evening and office workers.	No. Have a bicycle committee. May want to direct question to them.	Hasn’t affected adversely. Designed parking areas to accommodate buses. Services provided to alleyways.	Change of zoning to increase residential housing to increase night time business and traffic has been critical. 25 year observation: 1000 new housing built within blocks of DT since 1987 and office space—Fenwick and West (420 Employees) provided the synergy needed. Extremely long educational process (need for 4-6 story buildings to create more foot traffic) Key: Zoning changes to facilitate business. Updating parking signage—too integrated to see.

	Has the reduction from 4 to 2 lanes had a positive impact on the business community? (for individual businesses: on your business and/or on foot traffic)	When this change occurred, what street amenities were helpful? What street amenities would be helpful now?	Did the change increase foot traffic?	Have there been complaints or have issues arisen about the bicycle/pedestrian/vehicle interface on the street?	How has the two lane street in your district affected deliveries/circulation/buses and/or transit?	Any observations that you might like to add?
Rick Meyer Meyer Appliance Mountain View	Don't know what caused increased foot traffic, possibly the improvements. He receives lots of compliments on street—wider sidewalk, easier parking. Used to have squealing brakes, one person got hit. Eliminated speeding and skidding. Maybe has distracted cars from using this as a thoroughfare. Not a dead end link like Cal Ave. Has improved since ALL changes. Not just narrowing of the street. New businesses (boutiques) are new and doing quite well. His business is a destination shop (appliance store). Not much walk in traffic.	Much better trees, other trees broke sidewalk and dropped leaves. "Disneyland" trees now, drop leaves one week in the fall. Much neater. Also, the grid pattern sidewalk is a nice amenity. Pattern hides any dirt, cleaner look. Stamped sidewalk is nice. Signage was much improved—parking needs to be better signed. Working on this.	Definitely, more of an ambulatory downtown. Mainly at lunchtime. Not very convenient to get across railroad tracks. Had a competitor Mackle's Appliance went out of business when street closed on Cal Ave at the railroad tracks.	Problem-lip between parking and roadway. Ground lip down to help bikes. No problem now because it is wide enough. Back alleys, for deliveries	Didn't change the bus stops, improved train depot and circulation works well.	Signage for parking needs to be made better. Thinks that it will make walking more inviting at Cal Ave to go to two lanes, if wide enough.
Anne Stedler Economic Development Manager Los Altos	The situation I am aware of that is most like your questions is where we changed the parking from parallel to diagonal in Japantown (Jackson St) a few years ago.	There were already lots of street amenities, and this additional parking added more sense of activity (parking density!) to the scene.	I think adding parking does make it easier for customers to select these neighborhood districts downtowns. In the case of going from 4 to 2 lanes, I think it also helps. I am envisioning Lincoln Ave where it goes from two lanes each direction to one lane in each direction through the heart of Willow Glen. Doesn't that contribute to that pedestrian, walkable feel there?	I am not aware of such complaints. However, we are narrowing a street here in Los Altos by removing parking lanes and adding extra sidewalk – the bikes are going to share with cars (sharrows) and the bike group active here was not happy with that. Personally, I tend to agree with them, and I don't want the motorist in a shopping district to be worried about bicyclist and vise versa. I'd like to take care of bikes, too.	Busses are not on Jackson, and we kept loading zones. Circulation is slowed, and it is very nice. And the street feels more active to the motorist, too.	More information can be found at http://www.pps.org/ NYC's Project for Public Spaces.
Nancy Dunaway Downtown Assoc. Los Altos	Entire downtown only has one lane going each way. Slows traffic down which give driver a chance to see stores and see what's available. It has been this way for a long time, but it is very pedestrian friendly. The business community has been thriving with great businesses and some new additions. The changes occurred in the '90s.	They are anticipating some additional bulb outs in Spring 2011 and are looking forward to these. The Downtown Association and committee members work closely with the Chamber of Commerce, Kiwanis and the City for downtown enhancements. They also work with the City on issues that affect merchants like interpretation of code enforcement rules. Bulbouts get tricky. Great for pedestrian safety—extends sidewalk for restaurant seating. Problematic for events—20' fire lanes for events. Booths for farmer's market could be impacted.	Foot traffic is good and the downtown has a good mix of office and retail uses that support each other	No. There are no bike paths. Bikes and pedestrians share the sidewalks, but issues sometimes arise. So far, there are no major unresolved issues. Design has "sharrows" not bike lanes. Going ahead with project, but there was outcry from the biking community.	No major issues have emerged. There is sometimes some double parking, but deliveries are mostly done on off-peak times and haven't presented any major problems. No busses in DT triangle. They traverse San Antonio Road. Truck traffic is restricted. Use San Antonio. Larger stores are located on periphery where this is not a problem. Doing first street scaping.	Looking forward to additional improvements in the spring of 2011 which will include some additional bulb outs and seating for customers. Downtown Mountain View created new energy by narrowing. City doing street improvements in spring—extra bulb outs (size) and extra seating. Kiosks and way finding signage is helpful. These should be incorporated into project.

	Has the reduction from 4 to 2 lanes had a positive impact on the business community? (for individual businesses: on your business and/or on foot traffic)	When this change occurred, what street amenities were helpful? What street amenities would be helpful now?	Did the change increase foot traffic?	Have there been complaints or have issues arisen about the bicycle/pedestrian/vehicle interface on the street?	How has the two lane street in your district affected deliveries/circulation/buses and/or transit?	Any observations that you might like to add?
Carole Rast Roy's Station Japantown	One section was two way, then went to one way. Traffic calming made it all two way. Neighbors wanted people to slow down. Water mains were woven brick, wanted to limit weight of trucks. It has had a positive effect on neighborhoods, which has been good. Before, more transitional housing now younger families. Helps the businesses with good customers that are there all day. Take walks. Very busy walking on weekends with dogs and strollers	Bulbouts in Japantown have been a problem. People have lots of accidents. Going from wide to skinny street, people misjudge width of street, nick corners and have blowouts. It is hard for pedestrians to see before crossing. People sometimes are standing in the middle of the street waiting to cross. Planters could warn that pedestrians that are near by.	Yes. It seems to have. Senior center is nearby	They have a lot of bicyclists. Phil Wood makes custom hubs and sells bikes. Lots of people work for him and bicycle. Now there are bike parties, pick a place and go on 30 mile ride. Now thousands of people come. People who bike and walk see things differently—people in cars don't see as much. Bikers come back and shop.	Yes, older area. Parking is a premium. City just doubled parking meter rates for customers. Trucks making deliveries double park—this is a problem. Garbage pickup is an issue in older neighborhoods. Carts have to be wheeled out.	On 5th Street, there is a sidewalk and wider parking strip. A smaller parking strip is scary. Want a more wide parking strip so people feel safe to cross.
Nancy Hormann Executive Director Tempe, Arizona Downtown Association	Yes, very much so. The biggest thing was traffic calming. It stopped being a pass-through, and that has been helpful. We also widened the sidewalks. This helped the ambiance and atmosphere, and helped make it more pedestrian oriented than car orientation.	Widened sidewalks was the best thing. We also changed the ordinance against rails for outdoor cafes. We have more sidewalk cafes than we used to because it's an easier. We already had huge trees and benches, the shade trees are key element, especially since we're in Arizona.	Hard to say. We are a different animal. We have 68,000 students and we are one of the only walkable urban environments in AZ. What it did do is create a sense of place instead of a thoroughfare.	Not at all. We are a very bikeable town, and all the merchants were adamant that we create a bike lane. It did take away some car traffic, but it was generally supported.	Bus and transit- no. Deliveries—we are going through a re-signing of loading zones/ creating better loading zones. It was an issue that we didn't deal with up front, that now we're dealing with. We just designated "loading zones" with no caveats, so we have people who say "I'm loading myself in and out", which has been a huge problem. In hindsight, I wish he had looked at this issue as part of the planning.	The best part of everything is creating that sense of place. It really solidified it as a walking environment, not a driving environment. People aren't as adamant about finding street parking, since they know it's very walkable.
Julie Rose Los Altos Chamber of Commerce	Just did bulb outs. No narrowing on Main or State. Has always been a two lane street	Intersections have gathering places and improvements planned for spring 2011 which will be nice additions	Did increase number of businesses. Starbucks came after bulb outs. Changes made it a better place for businesses and pedestrians. Done in early '90s.	Didn't have the issue. Didn't make change. No bike lanes	None noted	In favor of new improvements at intersections planned for Spring 2011. These will improve car and pedestrian safety. Bulb outs. New seating is also planned

Minor, Beth

CITY OF PALO ALTO, CA
CITY CLERK'S OFFICE

11 FEB -9 PM 12: 05

From: Stefan Rosner [stefan.rosner@gmail.com]
Sent: Wednesday, February 09, 2011 12:03 PM
To: Council, City
Subject: Letter of support for California Avenue Streetscape Improvements Project

Dear Honorable Mayor Espinosa and Palo Alto City Council,

I am writing this letter to encourage you to direct staff to move forward with the subject project, to transform the California Avenue shopping district from the 1950s 4-lane configuration to a 2-lane configuration with pedestrian and bicyclist-friendly amenities.

When this street was created, it was a major through route connecting El Camino Real (State Hwy 82), Alma Street and 101. Cars ruled, and the primary objective of moving lots of vehicles through town as fast as possible took precedence over walkable / bikable communities. But then Oregon Expressway was created and aligned with Page Mill Road, and this section of California Avenue was closed to through motor vehicle traffic at the Caltrain station, effectively creating a dead-end "spur" road (but for the bike / pedestrian underpass under the train tracks and Alma Street, so important to maintaining safe connections for commuters and students) that is no longer a motor vehicle commute route but is a destination for those visiting the shopping district or the transit hub.

While I have enjoyed my frequent visits to this conveniently located shopping district for its diverse restaurants, coffee shops and the farmer's market since moving to the Barron Park neighborhood in 1999, it is clearly in need of transformation to better align it with today's values of supporting vibrant walkable and bikable communities with conveniently located shopping districts and transit hubs. With the significant subsidy in the form of the VTA grant to pay for the lion's share of the cost of the project, and the thoughtful and thorough planning, proactive community outreach and updates in response to community inputs, *we now have a real opportunity to finally turn this 4-block long, 4-lane wide "thoroughfare to nowhere" into a vibrant, mall-like shopping district.*

It is also worth mentioning that California Avenue is centrally situated as the connector or hub between several key bicycle routes through and across town, with the underpass connecting it to Old Palo Alto, Jordan Middle School and the Bryant Street Bike Boulevard, connections between the Caltrain station, the Stanford Marguerite Shuttle Buses and the Stanford Research Park, and Escondido and Nixon Elementary Schools, Park Boulevard and its connections to Evergreen Park, Southgate and Paly High School to the north and Ventura, Barron Park and points south.

As such, this stretch of California Avenue sees very heavy usage by cyclists, many of them students still developing important "street skills". Indeed, when the City of Palo Alto supports Bike to Work Day, the Energizer Station at the California Avenue underpass / Caltrain station is by far the most visited station. Many kids from College Terrace and Stanford use the underpass as a school route to Jordan Middle School, but presently these students tend to avoid this stretch of California Avenue, instead fanning out onto parallel streets (or riding on the sidewalks) on their return commute when the shopping district is in full swing, as it is not bicycle friendly in the present 4-lane configuration.

There has been some negative press about how the new 2-lane configuration won't be bicycle friendly or safe as there won't be a dedicated bicycle lane. I can say -- as a dedicated bicycle commuter, advocate for Safe Routes to School, and concerned parent -- that I will be far more comfortable with my own kids bicycling down California Avenue in the proposed 2-lane configuration, marked with "sharrows" to highlight the shared automobile / bicycle usage, and taking the lane where necessary. My 9 year-old 4th grader has no difficulty keeping up with the flow of traffic at vehicle speeds that are appropriate for such a shopping district that is not part of a major through route, and yet I avoid taking him down this stretch of California Avenue in its present configuration, where he is "sandwiched" between cars motoring on the left and diagonally parked cars on the right, and no striped bicycle lane or sharrows.

It is time for us to change this situation and finally make this stretch of California Avenue an integral hub of our

2/9/2011

modern, multi-modal transportation network. My response to those who are saying "If it isn't broken, don't fix it" is that it is, in fact, broken now. The claims that this project will lead to a traffic blockages are clearly not based on facts and appear to be inconsistent with the findings of traffic studies that have been conducted. Yes, there will of course be some unavoidable temporary disruption and dust during the construction phase, but California Avenue, with its ample nearby off-street parking and alley access to many of the businesses, is very well configured to weather such a temporary disruption.

Many of you undoubtedly remember the mid-80s era Castro Street in Mountain View, when I moved to the Bay Area. It was a 4-lane thoroughfare, very similar to the 1950s era California Avenue, through an outdated shopping district. Discussions of updating it and reducing it from the 4-lane to a 2-lane configuration were met with essentially all of the same arguments; fear of snarled traffic due to the lane reductions, fear of change. In vivid contrast, the Castro Street of today is a vibrant shopping district with a multi-mode transit hub that works perfectly well in a 2-lane configuration, even while serving nearly 3 times as many daily car trips as California Avenue in Palo Alto, and it seems that nearly everyone agrees that the change was overwhelmingly positive.

There is a lesson to be learned in this example. Rather than let this project get derailed or further delayed and jeopardized by those afraid of progress or change, and those who for whatever reason don't "get" today's values and vision for local and regional transit for the (much) greater good, let us instead choose to seize the moment and move forward into the future!

Together with the Stanford Avenue / El Camino Streetscape and Intersection Improvement Project that was approved last year, this California Avenue Streetscape Improvements Project can lead Palo Alto into the present and future as a city that continues to lead the way in planning and implementing bicycle and pedestrian friendly solutions to local and regional transit and Safe Routes to Schools.

Respectfully,

Stefan Rosner
Co-chair and Elementary School Co-Representative, Traffic Safety Committee, Palo Alto Council of PTAs (PTAC)
Traffic Safety Representative (TSR), Escondido Elementary School PTA
Matadero Avenue, Palo Alto

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