

Memorandum

September 11, 2002

To: Advisory Group

From: Phil Erickson and Thomas Kronemeyer, CD+A; Jerry Walters and Chris Gray, FPA; Reid Ewing

Total of 13 pages

Re: **El Camino Real Schematic Design Plan: UPDATED Goals, Objectives, Strategies, & Criteria**

This memo and the attached matrix have been refined further following the Community Workshop on June 1st, the June 25th and July 9th Advisory Committee Meetings, and the Council Study Session on July 15th.

Project Goals

The following is an adaptation of the “overall goal of this project” as stated in Palo Alto’s request for proposal and grant application to Caltrans:

The overall goals of the future design are to change the character of El Camino Real from a highway designed primarily for motor vehicle mobility to:

- *An **aesthetically attractive** corridor that projects a positive image of Palo Alto;*
- *A fully multimodal urban thoroughfare that maintains mobility and improves safety for transit, trucks, and autos, while improving **safety -and convenience for pedestrians and bicyclists**; and,*
- *A **center of community activity** rather than a barrier between activities on either side of the street.*

Other goals for the future of El Camino Real are to:

- **Make positive change soon** with full development occurring incrementally over time.
- **Improve quality of life** along El Camino Real while protecting its adjacent neighborhoods and districts; and,
- **Create economic benefits** for both businesses and property owners along El Camino Real and for the City of Palo Alto.

-

Project Objectives

The following defines the objectives of the project and the ultimate redesign of El Camino Real.

Objective 1: Create a Street and Streetscape that Complement Community Character

Redesign El Camino Real with a character and function that is more directly related to the existing and desired future character and function of the community along it.

Objective 2: Improve Landscape Quality and Quantity

Increase the amount of land area within the r.o.w. for landscaping -, and the number, health, and size of trees and other landscaping along the edges of the street and in the median.

Objective 3: Improve Aesthetic Quality of Street Design

-Improve the quality and condition of streetscape elements (lighting, benches, bus stops, etc.) and the paving of the roadway and sidewalks. Public art and new landscape must also contribute to this objective.

Objective 4: Improve Safety for All Modes

Improve El Camino Real to be a safer place for all pedestrians (including seniors, school children, and the disabled), bicyclists, transit riders, buses, autos, and trucks.

Objective 5: Provide Equity and Balance for All Modes

Redesign El Camino Real to reduce potential conflicts between and balance the needs of all modes of transportation - local and subregional auto, transit, and truck traffic; bicyclists of varied skill levels, and all pedestrians (including seniors, school children, and the disabled).

Objective 6: Design Street to Encourage Motorized Traffic to Drive at the Speed Limit

Redesign El Camino Real to encourage traffic to drive the speed limit for safety reasons and to allow aesthetic and multimodal improvements to El Camino Real. This objective will be balanced with traffic and transit needs for mobility along the length of the corridor.

Objective 7: Improve Ability to Cross the Street

Make El Camino Real safer and more convenient for pedestrians and bicyclists to cross by improving intersections and possibly by adding some mid-block crossings.

Objective 8: Minimize Direct and Indirect Impacts on Quality of Life and the Environment

Minimize direct and indirect impacts on quality of life along the street and in adjacent neighborhoods and districts through the design, construction, and function of the new El Camino Real. In addition, impacts on the environment should be reduced, particularly as relates to water and air quality and the solar “heat island” effects associated with larger areas of pavement in urban settings.

Objective 9: Create Cost Effective Improvements

The improvements to El Camino Real will be of high quality to the extent feasible. Both in regards to cost to benefit and initial cost compared to life-time cost need to be considered.

Objective 10: Define Some Immediate Improvements

Identify a set of improvements -that can be implemented as soon as possible to build incrementally to the ultimate vision for the future of El Camino Real; particularly in regards to planting trees and making other landscape improvements in the near term.

Linkage Between Goals and Objectives

The following defines the relationship between the project Goals and Objectives for the future of El Camino Real. Some objectives are listed under more than one goal. The objectives are followed by a more detailed discussion of the linkage between that objective and the accompanying goal.

Primary Goal - Create an Aesthetically Attractive Street

Objective 1: Improve Linkage Between Adjacent Community Character and Streetscape Design

Redesign El Camino Real with a character and function that is more directly related to the existing and desired future character and function of the community along it.

The character and function of the uses along El Camino Real changes as one moves through Palo Alto, but the character and functional design of the street does not change in relation to community character in any meaningful way. For example, parking is provided in many locations where there is little or no parking demand today or expected in the future. Sidewalk width is relatively consistent for the entire length of the corridor (where sidewalks exist), but some areas have more pedestrian activity and restaurants or cafes that could provide outside activity.

Objective 2: Improve Landscape Quality and Quantity

Increase the amount of land area within the r.o.w. for landscaping, and the number, health, and size of trees and other landscaping along the edges of the street and in the median.

The current impression of most of the existing El Camino corridor in Palo Alto is a paved environment dominated by motorized traffic. While trees and other landscaping do exist they do not make a strong impression in much of the corridor. More landscape, particularly healthier and larger trees will improve the aesthetic of the street and make it a more comfortable environment, especially for pedestrians.

Objective 3: Improve Aesthetic Quality of Street Design


Improve the quality and condition of streetscape elements (lighting, benches, bus stops, etc.) and the paving of the roadway and sidewalks. Public art and new landscape must also contribute to this objective.

The majority of the built elements along the street are all scaled to the motorized traffic in the roadway, not pedestrians and bicyclists. Also, the quality of materials both in the roadway and in the pedestrian realm does not reflect the importance of the street within Palo Alto or the community character of the districts and neighborhoods along the street. Improving the aesthetic quality of the street will support the economic vitality of businesses along the street.

Objective 4: Improve Safety for All Modes

Improve El Camino Real to be a safer place for all pedestrians (including seniors, school children, and the disabled), bicyclists, transit riders, buses, autos, and trucks.

The design of the street, both within the roadway and the pedestrian realm, is dominated by elements that are oriented to the El Camino Real's function as a major vehicular route. Street lighting, sidewalk width, intersection design, and many other elements can be improved to create a more attractive and safe environment for **all** the people and vehicles that use El Camino. El Camino Real as a whole is not more or less safe than other similar roadways. However, several locations have existing or potential safety issues that must be addressed to ensure that this roadway is safe for all modes including automobiles, transit, bicycles, and pedestrians. Safety for pedestrians and bicyclists is of primary concern to the community.



Primary Goal - Create a Multimodal Street

Objective 5: Provide Equity and Balance for All Modes

Redesign El Camino Real to reduce potential conflicts between and balance the needs of all modes of transportation - local and subregional auto, transit, and truck traffic; bicyclists of varied skill levels, and all pedestrians (including seniors, school children, and the disabled).

El Camino Real is primarily designed to serve its subregional function for motorized traffic traveling through Palo Alto. But the street also needs to serve pedestrians, bicyclists, and local traffic. A balance needs to be achieved to better serve all of these users, particularly given the community's concerns regarding pedestrian and bicycle safety along and across El Camino Real.

Objective 6: Design Street to Encourage Motorized Traffic to Drive at the Speed Limit

Redesign El Camino Real to encourage traffic to drive the speed limit for safety reasons and to allow aesthetic and multimodal improvements to El Camino Real, and this will be balanced with traffic and transit needs for mobility along the length of the corridor.

If traffic can be slowed, so that more people are driving at the posted speed limit, the "design speed" of the roadway can be reduced which will support design changes that improve the function of the street for other modes. This will also allow more changes that will improve the aesthetics of El Camino Real. The need to slow traffic to the speed limit needs to be balanced with the need for traffic to travel efficiently along the street. If congestion is perceived to be unacceptable traffic may divert to other routes within Palo Alto which could have a negative effect on the neighborhoods or districts along those other routes.

Objective 4: Improve Safety for All Modes

Improve El Camino Real to be a safer place for all pedestrians (including seniors, school children, and the disabled), bicyclists, transit riders, buses, autos, and trucks.

Many parts of the corridor are perceived to have and actually have safety issues. All modes of transportation must be able to use the street safely or they will not be able to use the street or cross it effectively. This is a particular concern for pedestrians and bicyclists who will not use the street without actually being safe or if they perceive that they are not safe, especially for school children who must cross the street to get to school.

Objective 7: Improve Ability to Cross the Street and at Intersections

Make El Camino Real safer and more convenient for pedestrians and bicyclists to cross by improving intersections and possibly by adding some mid-block crossings.

Many intersections, signalized or not, are barriers to those who need to cross the street; and in some portions of the corridor the distance between safe crossing locations is so long that it discourages pedestrians and could encourage them to jay walk. This is both a safety and a modal equity concern, particularly for school children who must cross El Camino Real if they are walking or riding their bicycles to school. Public art should be used to define and highlight crosswalks particularly at mid-block locations.



Primary Goal - Create a Center of Community Activity

Objective 3: Improve Aesthetic Quality of Street Design

Improve the quality and condition of streetscape elements (lighting, benches, bus stops, etc.) and the paving of the roadway and sidewalks. Public art and new landscape must also contribute to this objective.

The design and selection of streetscape elements, public art, and the landscaping of the street will reinforce the segments and nodes of activity along the street that are defined in the City's Comprehensive Plan. This will create a legible "structure" to the Corridor, reinforcing its function as a center of activity within the community.

Objective 5: Provide Equity and Balance for All Modes

Redesign El Camino Real to reduce potential conflicts between and balance the needs of all modes of transportation - local and subregional auto, transit, and truck traffic; bicyclists of varied skill levels, and all pedestrians (including seniors, school children, and the disabled).

In order for El Camino Real to become a center of community activity it must provide for more than auto, transit, and truck traffic. Particularly within the nodes along the corridor, the provision of transportation equity and improved safety for pedestrians and bicyclists will support the goal of broader community activity, allowing the street to be a part of vibrant mixed-use commercial districts, rather than being a barrier.

Objective 6: Design Street to Encourage Motorized Traffic to Drive at the Speed Limit

Redesign El Camino Real to encourage traffic to drive the speed limit for safety reasons and to allow aesthetic and multimodal improvements to El Camino Real, and this will be balanced with traffic and transit needs for mobility along the length of the corridor.

Traffic must be encouraged to travel at a safe speed, the posted speed, along El Camino Real in order for the street to function as a welcoming center of community activity.

Objective 7: Improve Ability to Cross the Street

Make El Camino Real safer and more convenient for pedestrians and bicyclists to cross by improving intersections and possibly by adding some mid-block crossings.

In most portions of the El Camino Corridor, the street currently creates a barrier between activities and neighborhoods on either side of the street. People must be able to move safely from one side of the street to another in order for the land uses along El Camino to support community activity.

Other Goal - Make Positive Change Soon

Objective 9: Create Cost Effective Improvements

The improvements to El Camino Real will be of high quality to the extent feasible. Both in regards to cost to benefit and initial cost compared to life-time cost need to be considered.

Both the initial construction cost of improvements and the maintenance and operation of the improvements over time will be an important consideration. Sharing of costs between the public and the private sector will need to be considered, as will the sharing of costs between public entities: the City of Palo Alto, the VTA (both as the transit provider and the Congestion Management Agency), MTC, and Caltrans.

Objective 10: Define Some Immediate Improvements

Identify a set of improvements that can be implemented as soon as possible to build incrementally to the ultimate vision for the future of El Camino Real; particularly in regards to planting trees and making other landscape improvements in the near term.

Many of the improvements being considered will require reconstruction of the roadway, including new curb and gutter locations. It may take time for funding to be made available for these improvements. The alternatives will explore opportunities to make some improvements prior to these more major reconstruction projects. In addition, the plan will need to indicate how changes to El Camino can be made incrementally in order to allow positive changes to be made sooner rather than later.



Other Goal - Improve Quality of Life

Objective 2: Improve Landscape Quality and Quantity

Increase the amount of land area within the r.o.w. for landscaping, and the number, health, and size of trees and other landscaping along the edges of the street and in the median.

The California Regional Water Quality Control Board, San Francisco Region; the Santa Clara Valley Water District, and the City of Palo Alto, amongst other Santa Clara County agencies, are in the midst of implementing new water quality regulations which require both the treatment of and flow reduction of stormwater run-off. The regulations apply to the planned improvement of El Camino Real – “Significant redevelopment projects...on a previously developed site that results in addition or replacement which [have a] combined total [of] 43,560 square feet or more of impervious surface.” (California Regional Water Quality Control Board, San Francisco Region, Order No. 1 01-119, NPDES Permit No. CAS029718, adopted October, 2001).

Increasing the landscaped area within the El Camino Real r.o.w. and planting more trees will help meet these regulations. The use of a variety of “green” infrastructure techniques or more mechanized methods of stormwater treatment and peak run-off reduction will be needed to meet the regulations. Also, increasing the number and size of trees will help to reduce peak run-off, because rain that falls onto a tree and its leaves has the opportunity to evaporate or is delayed in the time it takes to reach a drain intake.

Decreasing pavement area and increasing the number and size of trees will also help to reduce the “urban heat island” effects caused by the sun heating paved surfaces. Minimizing the solar heat on pavement will both serve to make the street more comfortable during hotter times of the year and will reduce air quality impacts. Also, the transpiration of water from plant’s leaves helps to reduce heat.

Landscape can be used to highlight and distinguish the character of El Camino Real’s segments and activity nodes. The selection of trees can highlight major changes in character and frame major gateways. Ground cover, shrubs, and plantings of flowers can give seasonal character to the corridor and highlight the corridor’s segments and nodes, such as areas with high pedestrian activity.

Objective 8: Minimize Direct and Indirect Impacts on Quality of Life and the Environment

Minimize direct and indirect impacts on quality of life along the street and in adjacent neighborhoods and districts through the design, construction, and function of the new El Camino Real. In addition, impacts on the environment should be reduced, particularly as relates to water and air quality and the solar “heat island” effects associated with larger areas of pavement in urban settings.

In addition to the discussion above under Objective 1, there are a variety of other strategies that can be used to minimize potential environmental impacts. For example, air quality will be effected by both encouraging non-motorized and transit modes, and by improving the consistency of traffic flow through the corridor. Noise impacts along the corridor can be reduced by slowing and improving the consistency of traffic flow, by improving paving and potentially through using particular types of paving.

There are also general practices in selection of construction materials and in construction practices that will be encouraged in all of the alternatives to the extent that costs can be justified. The roadway and associated improvements will be designed to avoid the diversion of traffic into adjacent neighborhoods and districts.



Other Goal - Provide Economic Benefits

Objective 1: Improve Linkage Between Adjacent Community Character and Streetscape Design

Redesign El Camino Real with a character and function that is more directly related to the existing and desired future character and function of the community along it.

Objective 3: Improve Aesthetic Quality of Street Design

Improve the quality and condition of streetscape elements (lighting, benches, bus stops, etc.) and the paving of the roadway and sidewalks. Public art and new landscape must also contribute to this objective.

Matching the design and character of the street with adjacent uses will help to support business activity. For example, improving pedestrian amenities around the intersection with California Avenue will make it more desirable for workers in the employment areas to the west to walk to businesses along El Camino Real and California Avenue at lunch or after work. In general a more visually attractive street will support business activity.

Objective 7: Improve Ability to Cross the Street and at Intersections

Make El Camino Real safer and more convenient for pedestrians and bicyclists to cross by improving intersections and possibly by adding some mid-block crossings.

Making the street more comfortable to cross will help to create districts of supporting activities on both sides of the street. For example, the area between California Avenue and Stanford Avenue would be a stronger shopping district if patrons were more comfortable parking once and walking to various businesses along El Camino Real.

Objective 8: Minimize Direct and Indirect Impacts on Quality of Life and the Environment

Minimize direct and indirect impacts on quality of life along the street and in adjacent neighborhoods and districts through the design, construction, and function of the new El Camino Real. In addition, impacts on the environment should be reduced, particularly as relates to water and air quality and the solar "heat island" effects associated with larger areas of pavement in urban settings.

Minimizing impacts will make the new El Camino Real easier to achieve and more cost effective to maintain into the future.

Objective 9: Create Cost Effective Improvements

The improvements to El Camino Real will be of high quality to the extent feasible. Both in regards to cost to benefit and initial cost compared to life-time cost need to be considered.

The cost and quality of physical improvements to El Camino Real needs to be balanced with the resulting longer term maintenance and replacement costs. Achieving an appropriate balance will minimize cost impacts to Caltrans and the City of Palo Alto.

Objective 10: Define Some Immediate Improvements

Identify a set of improvements that can be implemented as soon as possible to build incrementally to the ultimate vision for the future of El Camino Real; particularly in regards to planting trees and making other landscape improvements in the near term.

Making immediate improvements along El Camino Real will strongly illustrate the community's commitment to the corridor. Initial improvements can start to make positive change in the corridor and support further private and public investment in development along the street and in the character of the street itself.