

Arroyo Seco Parkway Corridor Management Plan



A Rehabilitation and Preservation Plan for Southern California's Most Historic Road

**WORKING DRAFT for Public Agency and Stakeholder Review
February 12, 2004**

Arroyo Seco Parkway **Corridor Management Plan**

A Rehabilitation and Preservation Plan for Southern California's Most Historic Road

Prepared for:

The California Department of Transportation, District 7 and California State Scenic Byways Program through a cooperative agreement with the Santa Monica Mountains Conservancy

By:

The National Trust for Historic Preservation, Rural Heritage/Historic Roads Program

With:

The Arroyo Guild
California Archives
The Center for Preservation Education and Planning
Design Aid Architects
Glatting Jackson Engineers
Heritage Tourism Program, National Trust for Historic Preservation
Huitt-Zollars, Inc.
Jones and Jones Architects and Landscape Architects

In Association With:

Arroyo Seco Foundation
North East Trees

Through a Grant From:

The National Scenic Byways Program of the Federal Highway Administration
2003

Notes About this Corridor Management Plan

The Corridor Management Plan for the Arroyo Seco Parkway has been developed as a document envisioning the possibilities and opportunities that may be undertaken for the Arroyo Seco Parkway (SR 110) and the Arroyo Seco corridor. This advisory document seeks to present a comprehensive vision for the corridor and recommend potential actions and present maintenance and treatment guidelines to see that vision become a reality. The implementation of the actions identified within this document will be dependent on the local, state and federal agencies or private land owners that own, manage or have oversight for the areas or resources referenced.

National Scenic Byways Program

The Arroyo Seco Parkway was designated as a National Scenic Byway under the National Scenic Byways Program of the Federal Highway Administration by the U.S. Secretary of Transportation in June 2002. This corridor management was developed as a partial fulfillment of the requirements for designation as a National Scenic Byway that requires the preparation of a corridor management plan.

The National Register of Historic Places

The Arroyo Seco Parkway was formally determined Eligible for listing on the National Register of Historic Place by the United States Department of the Interior in the 1980s. Part of the scope of work for this project was to take the necessary steps necessary for formal listing. As of this date, the State Office of Historic Preservation is reviewing the application. All state and federally funded activities must follow the US Secretary of the Interiors Standards for Rehabilitation (Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f

Table of Contents

Introduction.....	5
PART 1	
History Background, Principles and Policies	11
1.1 A Brief History of the Arroyo Seco Parkway and Corridor.....	12
1.2 Laying the Groundwork	18
1.3 Applicable Policies.....	22
1.4 Definitions and Terminology.....	28
PART 2	
Recommended Actions for the Arroyo Seco Parkway and Corridor ...	29
2.1 Actions for Restoring and Rehabilitating the Parkway.....	30
2.2 Actions for Building a Safer Parkway.....	38
2.3 Actions for Building a Landscape Framework.....	53
2.4 Actions for Improving the Environment.....	61
2.5 Actions for Welcoming the Visitor.....	71
2.6 Actions for Engaging the Public.....	79
2.7 Actions for Maintaining the Parkway.....	82
2.8 Fulfilling the Vision.....	86

Introduction

“It is an unexpected joy (and occasional terror) to drive the Arroyo Seco Parkway. Many who drive it really don’t understand the nuances of its design—its varied contours, parklands and civil engineering advancements—as it threads its way along the historic watercourse from Los Angeles to Pasadena. For most, heavy traffic, speed and accidents conspire to diminish what was intended to be a pleasure road.

--Jeffery Samudio, author, Images of America, Los Angeles, California



If one were to do an inventory of the most significant historic automobile roads in the United States the Arroyo Seco Parkway would undoubtedly rank near the top. Joining the likes of the other great roads in the American highway pantheon such as the Bronx River Parkway and the Historic Columbia River Highway—roads that influenced roadway design and established the culture and parameters for a nascent highway system—the Arroyo Seco Parkway established innovations and expectations that would become hallmarks of the twentieth century landscape.

The Arroyo Seco Parkway opened on December 30, 1940. A hybrid highway design incorporating elements of early twentieth century parkway design and foretelling the modern freeway, the Arroyo Seco Parkway opened to great fanfare and expectation as it ushered in a new era of transportation linking downtown Los Angeles and Pasadena. Early accounts liken the parkway to the Hanging Gardens of Babylon due to its lush planting palette and scenic views of the leafy parks paralleling its course. The parkway winding along the Arroyo Seco and in the shadow of the San Gabriel Mountains was also envisioned as a new economic engine bringing efficiency and commerce to a burgeoning Southern California economy.

By mid 1950's the parkway had been renamed the Pasadena Freeway and many of its characteristic features began to fade as it was incorporated into the innovative and much admired Los Angeles freeway system. Over the years age, population growth and maintenance constraints have all contributed toward the diminution of this once noteworthy road. Today, the Arroyo Seco Parkway has lost much of its original aesthetic charm and has become a problematic corridor regarding safety and maintenance to both the parkway managers and the traveling public.

A renewed interest in the Arroyo Seco Parkway is reflected by the significant increase in attention and recognition the parkway has received in recent years, including designation as a California State Historic Parkway in 1993, listing as a National Historic Civil Engineering Landmark in 1999, documentation by the Historic American Engineering Record in 2000, and designation as a National Scenic Byway by the U.S. Secretary of Transportation in 2002. This corridor management planning project reflects the commitment to the management of the Arroyo Seco Parkway by Caltrans and the communities of the corridor.

While the corridor management plan will focus most particularly on issues of safety, design, preservation and management for the Arroyo Seco Parkway, it will be developed in consultation with and recommend coordinated efforts for the restoration of the Arroyo Seco channel, multi-modal regional transportation goals, public park and recreation needs and preservation and enhancement throughout the Arroyo Seco regional corridor that the road traverses.

The Public Perception: Safety and Litter

While this plan was designed around and developed to advance the preservation and appreciation of the historic Arroyo Seco Parkway, it must be remembered that the general public perception of the parkway is not that of a nationally recognized historic resource, but rather that of a tired, often frustrating, and unattractive freeway. The two most common and universal comments regarding the parkway are "safety" and "litter". How to address these very pragmatic, but real concerns, on a facility that has a narrow right-of-way and an absence of shoulders will require serious consideration.

A safety analysis of the Arroyo Seco Parkway suggests a transportation corridor with relatively consistent accident patterns. Not surprisingly, high speeds, sight distance, weaving and entry and exit points along the parkway have been identified as problems.

One parkway traveler recently equated the Arroyo Seco Parkway to "a dusty old attic where nobody has ever thrown anything out." For any traveler along the historic parkway, this analogy to grandmother's attic is most apt. One need simply view layers of chain link fence where replacement fencing has been erected without the demolition of the original fencing, duplicative signs, abandoned irrigation lines and simply large quantities of trash and refuse strewn along the right-of-way and often trapped between fences and walls.



Litter along the Arroyo Seco Parkway

Until the basic issues of safety and litter can be addressed the historic features and landscape of the Arroyo Seco Parkway will never be fully enjoyed by its drivers, provide a safe environment for Caltrans staff and be viewed as an asset to the communities through which it passes.

About This Corridor Management Plan

The Corridor Management for the Arroyo Seco Parkway has been designed to provide both the overarching vision needed for a complex historic road through a multi-jurisdictional corridor and the specific actions and guidelines needed to direct the activities necessary to ensure the implementation of that vision.

Project Philosophy

The Arroyo Seco Parkway Corridor Management Plan was undertaken with a philosophy that the preservation, restoration and rehabilitation of the historic parkway's bridges, lights, landscape, views and other character defining features can, by distinguishing the parkway from the other freeways in the greater Los Angeles basin, improve the safety and function of the parkway—making the parkway a positive feature of the larger Arroyo region. The historic Arroyo Seco, through its parkway, parks and neighborhoods can reclaim the best of its former beauty and ecology by improving community linkages, safety and recreation and restoring a healthy environment. The introduction of a refreshed and pleasing setting for the neighborhoods that the parkway and parks traverse, can improve driver behavior and will return civility and enjoyment to the parkway originally envisioned as a scenic drive between downtown Los Angeles and Pasadena.

Accomplishing the particular goals of this corridor management plan, no matter how large or small, will require that the Arroyo Seco Parkway and the Arroyo Seco corridor be a recognized as a unified landscape shaped and defined by nature and influenced by human settlement. The individual elements of a successful corridor plan should interact in a harmonious and seamless relationship, where divisions of ownership and management are not apparent to the traveler through the corridor, and where the safety, stewardship and enjoyment of the corridor are assured.



Arroyo Seco Parkway

To ensure the implementation of the recommendations contained in the ASPCMP, the plan was developed with the assistance of the communities along the Arroyo and through a careful review of and in consultation with the regulatory agencies that must eventually weigh in and approve many of the activities needed to fulfill the ultimate vision for the Arroyo Seco Parkway.

Vision

The historic parkway between Los Angeles and Pasadena, known as the Arroyo Seco Parkway, shall be restored and rehabilitated to showcase the finest characteristics of its design when first opened to the motoring public in 1940. The rehabilitated parkway will distinguish the Arroyo Seco as one of the most unique cultural and environmental landscapes in the Los Angeles area in a setting that provides for public safety and security, and fosters a respect for the character defining features crucial to the preservation and education befitting a nationally recognized historic resource.

The Four Goals

Four goals have been identified to implement the vision in its broadest sense and to provide the California Department of Transportation District Seven Office, the owner of the historic parkway, a framework from which recommendations for the enhancement of the greater Arroyo Seco corridor as viewed from the Arroyo Seco Parkway may be undertaken. The four goals of the corridor management plan are:

1. Improving Safety on the Arroyo Seco Parkway
2. Maintaining the Cultural Resource that is the Arroyo Seco Parkway
3. Create a Streamlined environmental review process to implement 1 and 2.
4. Provide recommendations for the enhancement of the historic Arroyo Seco Parkway viewed.

1. Improving Safety on the Arroyo Seco Parkway

The first goal of the ASPCMP is to improve the safety of the Arroyo Seco Parkway. Improved safety will not only reduce risks to the parkway traveler, it will also reduce risks to Caltrans maintenance staff—thereby enabling a better maintained parkway where repairs, litter collection and landscape maintenance can be better accomplished.

2. Maintaining the Cultural Resource that is the Arroyo Seco Parkway

The Arroyo Seco Parkway is a significant historic resource representing transportation, engineering and landscape design in the early twentieth-century. Many of the distinctive features that made the parkway a landmark achievement in California transportation when it opened in 1940 still remain. Modern transportation theory, advancements and policy now make it possible to meet the goal of improved safety while restoring, rehabilitating and preserving historic parkway features.

3. Create a streamlined environmental review process to implement 1 and 2

For a resource as complex and diverse as the Arroyo Seco Parkway, multiple layers of environmental, transportation and historic preservation reviews are mandated by the local, state and federal governments. In order to streamline the review process and speed implementation of the recommendations contained within this plan, the recommendations for the Arroyo Seco Parkway will be coordinated through the appropriate regulatory agencies. For recommendations for the Arroyo Seco corridor, regulatory and approval bodies will be identified.

4. Provide recommendations for the enhancement of the historic Arroyo Seco Parkway viewshed.

The Arroyo Seco Parkway, like all classic parkways, is based on a theory of aesthetic interaction with the larger landscape. From the snow-capped San Gabriel Mountains and views of the Los Angeles skyline beyond Elysian Park to the chain of smaller parks and neighborhoods in Los Angeles, South Pasadena and Pasadena, it is the unified corridor that gives form to and helps to define parkway. Therefore recommendations for landscape, scenic and recreation enhancements will be made to further reinforce the idea of the parkway as a positive element of the Arroyo Seco.

Plan Structure

For the corridor management plan to be effective it must not only direct activities and actions to fulfill the vision, it must also provide, depending on the nature of the recommendation, a philosophical, procedural or legal rationale behind the recommendation. To affect the maximum utility, the corridor management has been divided into two principal parts.

PART 1 Historic Background, Principles and Policy

Existing conditions, programs and policies define the physical structure or status of parkway and corridor resources as they exist today and have been shaped by the physical and political history of the Arroyo corridor. Current laws, policies and practices that are applicable or relevant, and the history of the parkway are presented.

PART 2

Recommended Actions for the Arroyo Seco Parkway and Corridor

This section outlines the recommended actions necessary to fully implement the parkway vision. Specific recommendations for maintenance, policy, preservation and safety are addressed.

PART 1

HISTORIC BACKGROUND, PRINCIPLES AND POLICY

OPENING DAY, DECEMBER 30, 1940
Motorcade on the Arroyo Seco Parkway



1.1

A Brief History of the Arroyo Seco Parkway and Corridor

“From the relatively narrow Figueroa tunnel you suddenly find yourself launched like a speedboat in a calm, spacious divided channel. Channel is the word too, for it’s in the arroyo, below the level of traffic tormented streets. No brazen pedestrians nor kids riding bikes with their arms folded! No cross streets with too-bold or too-timid drivers jutting their radiators into your path. And no wonder I made it from Elysian Park to Glenarm Street in Pasadena in 10 minutes without ever edging over a conservative 45 miles an hour...

-- John Cornell, Westways Magazine, Automobile Club of Southern California, 1941



The Arroyo Seco Parkway is a landmark accomplishment in American transportation history. It represents a transitional period in automobile travel and highway design in which the traditional parkway concepts developed in the East were melded to the emerging California automobile culture. California Department of Roads (the predecessor to Caltrans) engineers visited the parkways of metropolitan New York to learn the latest techniques of scenic, safe and high speed travel. The desire to create a scenic parkway was undertaken in a region with the highest per capita automobile ownership in the United States—the two car family a Los Angeles reality shortly after World War I.¹

Long before the Arroyo Seco Parkway, the Arroyo Seco was a transportation crossroads for Native Americans and later Spanish and Mexican Period settlers and explorers. When railroads became the mode, this region created a rail and electric car legacy that shaped the future of the greater Los Angeles . The Arroyo region served as the inspiration for the Arts and Crafts Movement in Southern California due to its remarkable geography and settlement by early pioneering artists and artisans. The parkway and corridor presents a fascinating and little told story.

¹ Longstreth, Richard, City Center to Regional Mall (Cambridge, Massachusetts, MIT Press, 1997). p. 14.

Summary



When opened in 1940, the Arroyo Seco Parkway linking downtown Los Angeles with Pasadena was hailed as an aesthetic, engineering and commercial triumph. The rapid limited-access route, with characteristics that would ultimately define the modern freeway, was a boon to business interests; the lush plantings, adjacent parklands and distant views led many to refer to the parkway as the “hanging gardens.”

While the history of the parkway is significant to the story of the road in America, the history of the corridor, its landscape, the views from the parkway are much cloudier. The Arroyo Seco valley from the mid-nineteenth century was revered for its natural beauty and historic associations with Native Americans and, perhaps more in romance than reality, Spanish Colonial settlement. It was here the Arts and Crafts Movement would be established by luminaries such as Charles Lummis who would transfer the Arroyo, through intellect, design and architecture, into a model of environmental sensitivity (at least according to nineteenth century values) and thoughtfulness. The corridor was so celebrated that Teddy Roosevelt when visiting Los Angeles and crossing the Arroyo Seco stream with his friend Charles Fletcher Lummis suggested that the Arroyo would make a wonderful park.

It was from this reality that the idea of a parkway through the Arroyo first emerged. The original vision, as articulated in the 1930 Olmsted-Bartholomew Plan for the Los Angeles Region, recommended a serpentine two-lane parkway winding among the hills, trees and parks of the Arroyo valley. By the time it was constructed in 1940, the Arroyo Seco Parkway had morphed into a six-lane quasi parkway/prototype freeway and the waters of the Arroyo Seco were restricted to a concrete and stone channel. Lands recommended for park acquisition were never fully secured and by the 1950's the road was routinely referred to as the Pasadena Freeway.

History of the Arroyo Seco Parkway and Corridor

The following history is taken from the Historic American Engineering Record of the National Park Service's documentation of the Arroyo Seco Parkway for the Library of Congress in the summer of 1999 and "Putting Back the Pleasure in the Drive: Reclaiming Urban Parkways for the 21st Century," by Anastasia Loukaitou-Sideris and Robert Gottlieb.

The Origin of Parkways

The first use of the word parkway in the American context was made before the advent of the automobile. Frederick Law Olmsted and Calvert Vaux in a report to the Board of Commissioners of Prospect Park in Brooklyn, New York in 1866 recommended the addition of a *parkway* to the plans for the park. Inspired by the celebrated landscaped boulevards of Paris and Berlin, Olmsted and Vaux viewed parkways as carriageways, surrounded and contained by the park and designed for pleasure riding.

Pleasure parkways designed by Olmsted and Vaux were built in Boston and Chicago. Other landscaped boulevards called parkways were also built in eastern cities, and, with the advent of the automobile, the parkway concept as a specialized roadway was revived. The first parkway for automobiles was the Bronx River Parkway in Westchester County New York, completed in 1923, and designed to provide leisure driving and recreational opportunities. The Bronx River Parkway's great success in combination with a growing number of motorists led to the development of more of these roadways, most notably in New York City where Robert Moses oversaw the construction of a parkway network. In the 1930s the modern parkway movement began to expand out of New York with the construction of several federal parkways, such as the Skyline Drive in Virginia, Blue Ridge Parkway in North Carolina and Virginia, Merritt Parkway in Connecticut, and others. During the same decade Los Angeles planners, aware of the parkway construction in eastern cities, started to envision the creation of 'greenbelts across the city' –parkways that would address the region's increasing traffic while at the same time encourage "highway recreation" and "outdoor sightseeing." These ideas were elaborated in Frederick Olmsted Jr. and Harlan Bartholomew's 1930 report for the Los Angeles Chamber of Commerce, linking parkway development with opportunities to create open spaces and parklands, including along the Arroyo Seco and Los Angeles River watershed from Pasadena to downtown Los Angeles. After a series of debates regarding feasibility, finances, and transportation and land use goals, the "first freeway of the west," the celebrated Arroyo Seco Parkway, was commissioned and broke ground in 1938.

The Arroyo Seco Parkway

*"Now I know how a package feels when it gets an unobstructed ride through a chute to the shipping department. I've just made a run out to Pasadena on the completed Arroyo Seco Parkway From the relatively narrow Figueroa tunnels you immediately find yourself launched like a speedboat in a calm, spacious, divided channel. Channel is the word, too, for it's in the arroyo, below the level of traffic-tormented streets. No brazen pedestrians nor kids riding bikes with their arms folded. No cross streets with too-bold or too-timid drivers jutting their radiators into your path. And no wonder I made it from Elysian Park to Broadway and Glenarm Street in Pasadena in 10 minutes without edging over a conservative 45 miles an hour."*²

So wrote John Cornell in *Westways*, a magazine published by the Automobile Club of Southern California, less than one month after the Arroyo Seco Parkway was opened to traffic. Cornell's remarks captured the experience of driving this new road -- an experience which, for Cornell, was both efficient and leisurely -- offering a new opportunity for motorists in Southern California. The Arroyo Seco Parkway was the first grade-separated, limited-access, high-speed divided road in the urban western United States and the initial stretch of road for what would become the world-renowned Los Angeles metropolitan area freeway system.

² John Cornell, "Riverbed Route" *Westways*, January 1941

Built in three major stages from 1938 to 1953, the 8.2-mile parkway was envisioned both as a scenic pleasure road traversing the Arroyo Seco and as a vital traffic conduit linking the expanding cities of Pasadena and Los Angeles. Combining ideas reminiscent of an older parkway tradition with those more appropriate for modern freeway design, the Arroyo Seco Parkway marks an important transitional moment in the history of American engineering, landscape architecture and transportation planning.

The roadway, as completed in 1953, extended from Glenarm Street in Pasadena to the Four-Level Interchange just northwest of downtown Los Angeles. The six-lane, approximately \$9 million roadway required over thirty bridges and underpasses, four tunnels, and numerous safety features. Its construction was facilitated by the installation of the concrete Arroyo Seco Flood Control Channel, completed as a Works Progress Administration (WPA) relief project.



Arroyo Seco Parkway, 1940

The initial six miles of road, completed from 1938 to 1941, were described by engineers as “picturesque” and characterized by a comprehensive landscape program that included a primarily native plant palette and elegant modern bridges. At the official opening ceremonies on December 30, 1940 California Governor Culbert L. Olson declared the Arroyo Seco Parkway to be the “first freeway in the West.” The connection of the parkway in 1953 to the Four-Level Interchange (and thereby to the larger Los Angeles regional freeway network) marked the final chapter in a series of plans and proposals dating back to the late nineteenth century for a limited access road connecting Los Angeles and Pasadena.

The first spade of earth was turned for the Arroyo Seco Parkway in March 1938 under the aegis of the State Division of Highways. The approval for the Arroyo Seco Parkway was hammered out earlier that year by a characteristically large and unwieldy coalition of state and local lawmakers, planners, the Automobile Club of Southern California, the Union Pacific and Santa Fe railroads, the cities of Pasadena, South Pasadena, and Los Angeles, the growing communities of the San Gabriel Valley, and residents along the right-of-way. It was not a particularly smooth process, and there was rarely agreement about whether the road should be a high-speed thoroughfare, a recreational parkway, or some combination of the two. Part of this apparent confusion stemmed from the fact that the Arroyo Seco Parkway was built at a transitional time in the history of road building, both in the city of Los Angeles and throughout the United States more generally. While borrowing certain features of the parkway tradition on the East Coast (such as limited access and the elimination of at-grade intersections), the Arroyo Seco Parkway was different from most earlier parkways in that its design was ultimately influenced more by the need for a high-speed commuter route than any other factor.

It was envisioned as part of a larger scheme of metropolitan high-speed roadways, and its construction was spurred by the desire to alleviate traffic congestion on the streets between Pasadena and Los Angeles. It was thus no coincidence that the opening ceremonies for both the six-mile original stretch and the 2.2-mile “Southerly Extension” took place on December 30, just in time for the New Year’s Day Tournament of Roses Parade and college football game in Pasadena – events which always attracted a tremendous amount of traffic. Safety features also played a large role in the overall parkway design.

Safety concerns were particularly important because it was made to accommodate 45-mile-per-hour travel – the maximum allowable speed for California state roads in the 1930s and 1940s. It was hailed both as a “modern” and “model” road by state highway engineers. The parkway eliminated all at-grade crossings and incorporated other safety features that had been recently adopted as new policy measures by the California Division of Highways at a time when these features had not been implemented together in a single road design in the western United States.

In the construction of the Arroyo Seco Parkway traffic safety was of paramount importance. To reduce the possibility of head-on collisions a 6-foot median strip was designed. The shrubbery planted in the median was intended to shield drivers from the headlight glare of oncoming traffic. Fences were erected to separate traffic (children or animals) from nearby properties. The lanes were 11-feet wide, and a shoulder of 10-feet was originally planned for each side of the roadway. Different-colored types of pavement (concrete and asphalt) were used for different lanes to encourage drivers to stay in their lane. Other safety features included special safety lighting at all inlets and outlets of the parkway, warning and directional signals, and red reflectors and amber-colored flashers installed in curbs. A 1945 study pointed to these safety features as an explanation of the remarkably low ratio of traffic accidents that the parkway enjoyed in comparison to other major highways with similar traffic volumes.

Even if it was conceived as part of a larger network of high-speed roads, there are noticeable differences between the Arroyo Seco Parkway and the newer metropolitan freeways that surround it. There was a strong emphasis on the parkway’s landscape in the project’s planning stages. It was important to engineers that anything unsightly should be concealed from view: sometimes by plant materials, at other times through design. Only with the commencement of construction for the Southerly Extension did the “parkway” ideals begin to fade into the background.

Consistent with the dictums of parkway planning the Arroyo Seco Parkway offered driving pleasure to motorists by exposing them to the scenic beauty of the surrounding landscape. Existing parklands were enhanced by the planting of approximately 4,000 plants of various varieties, which were selected and placed so that "a brilliant showing of color would be maintained throughout the year." A major program of roadside beautification eliminated billboards, advertisements and other objects of commercial blight. To enhance the pleasure of the ride engineers adjusted the road's

contours to fit the landscape, installed "rustic" rails on rubble parapet walls and wooden railings along on- and off-ramps.³



To understand why the Arroyo Seco Parkway looks the way it does, one cannot ignore the lingering influence of late nineteenth and early twentieth century proposals for a series of parkway roads intended to connect a number of city parks. The road's curving design, its carefully crafted landscape with native plants, and the decorative railings on some of its bridges suggest a very different kind of road than the utilitarian high-speed freeways that followed in the Los Angeles region.

Arroyofest, June 2003

³ Charles C. Cohan, "Ceremonies Launch Work on Arroyo Seco Highway," *Los Angeles Times*, May 3, 1936.

1.2 Laying the Groundwork

I wonder why it is that when I plan a route too carefully it goes to pieces, whereas if I blunder along in blissful ignorance aimed in a fanciful direction I get through with no trouble.

--John Steinbeck, Travels With Charley, In Search of America



The Arroyo Seco Parkway is but one element in a corridor rich in history, activity and investment. In recent years extraordinary new efforts have been launched, from the local to the regional level, to enhance and revitalize one of the Los Angeles basin's oldest settled areas.

No planning process, particularly within a corridor with a history as rich and complex as the Arroyo Seco, occurs within a vacuum or without the benefit of earlier endeavors. Numerous community and governmental studies and planning efforts have been undertaken in recent years. Issues as diverse as community recreation, watershed protection, the planting of trees and the design of the new Gold Line, have been seriously undertaken by community leaders, government and non-profit organizations. Many are already demonstrating accomplishments.

Many of these efforts have been undertaken with a spirit of cooperation and coordination with parallel efforts within the corridor, and it is the intention of this plan to do the same. Such an approach is more than courtesy, it is wise planning. It is, after all, impossible to "compartmentalize reality" into governmental or community units. Parkway run-off impacts water quality. Water quality impacts parks and wildlife. Parkway safety affects the safe enjoyment of parklands and parkway noise impacts the quality of life in the neighborhoods of the Arroyo.

Arroyo Seco Parkway Task Force

In 1996, the Arroyo Seco Parkway Task Force was formed by State Senator Richard Polanco. Formed as a result of community concerns about safety, trash, noise and parkland integrity, the Task Force consisted of approximately forty stakeholders including local, county, state, and federal agencies, elected officials, community residents, and local nonprofits and businesses.

The task force was charged with developing a long-term vision for the parkway corridor. The task force studied three core topics: improving the safety and appearance of the parkway; restoring and interpreting the corridor's historic and cultural resources; and, enhancing the corridor's scenic and recreational resources.

It met approximately twice a month over a nine-month period to develop a list of recommendations for the Arroyo Seco Parkway. On July 15, 1997 a list of draft recommendations, goals and actions was presented to Caltrans management. The District has responded positively to many of the task force recommendations, including sponsoring the HAER recordation project, the Cal Poly Pomona Landscape Framework Plan, the UCLA/Occidental traffic analysis and this Corridor Management Plan.

Several tasks necessary to the implementation of this Corridor Management Plan have already been undertaken or are in process and include:

National Register of Historic Places Determination of Eligibility

In 1983, the Arroyo Seco Parkway was “determined eligible” for the National Register of Historic Places by Caltrans, the Federal Highway Administration and the Keeper of the National Register—a concurrent agreement.

The National Register of Historic Places, administered by the National Park Service, recognizes places of historic significance in the United States. As a property previously determined eligible for the National Register, all federal and state requirements associated with the National Register are already applicable (determination of eligibility for the National Register automatically invokes federal and state protections).

SR 110 Changes Name from Pasadena Freeway to Historic Arroyo Seco Parkway

In 1992, the California State Legislature officially designated State Route 110 as the Historic Arroyo Seco Parkway. This action was led by then State Senator Richard Polanco and was intended to bring back the original name of this parkway.

Preserving the Historic Road in America Conference

Due to the national significance of the Arroyo Seco Parkway, the first national conference on historic roads, “Preserving the Historic Road in America”, was hosted in Los Angeles in 1998. Sponsored by the National Trust for Historic Preservation and the National Park Service in cooperation with Caltrans District 7 and the Center for Preservation Education and Planning, the conference drew over 100 transportation and preservation professionals to discuss global issues and needs of historic roads with the Arroyo Seco Parkway as the conference's symbolic backdrop.

American Society of Civil Engineer's National Landmark Designation

In 1999, the American Society of Civil Engineer's honored the Arroyo Seco Parkway with national distinction by naming the resource a National Engineering Landmark.

HAER documentation

In the summer of 1999 the Historic American Engineering Record of the National Park Service documented and recorded the Arroyo Seco Parkway for the Library of Congress. A written history of the parkway complete with 24 (24" x 36") interpretive pen and ink drawings and over 100 black-and-white photographs documenting current conditions of the parkway and contributing features was assembled.

A Landscape Framework Plan for the Arroyo Seco Parkway Corridor

In 2001 the graduate students in the School of Environmental Design, Graduate Landscape Architecture Program at Cal-Poly State University prepared a landscape framework plan for the Arroyo Seco Parkway corridor. This plan, developed for Caltrans District 7, provided an overview of the history of the parkway's landscape and made broad recommendations for potential improvements and restoration. The observations and recommendations made by the student project provided one of the first comprehensive analyses of the landscape of the Arroyo Seco corridor.

The Arroyo Seco Watershed Feasibility Study

The Arroyo Seco Watershed Feasibility Study, completed in 2001, discusses watershed quality, hydrology, flood control, biological diversity and native habitat restoration, and recreational and open space opportunities for the Arroyo Seco. This groundbreaking document provided the natural environment background analysis for the Arroyo Seco Parkway Corridor Management Plan.

Arroyo Seco Parkway Meeting in Sacramento

On October 21, 2002 representatives of Caltrans District 7 and representatives of the ASPCMP project team met with representatives of Caltrans, the California State Office of Historic Preservation Office (CalSHPO), Federal Highway Administration- California District Office (FHWA-CA) to introduce the Arroyo Seco Parkway corridor management planning process.

"Meeting of the Parkways"

In November 2002 representatives of Caltrans and the project team met with representatives of the Massachusetts Parkway and Park Roads Initiative and the Olmsted Center. The meetings were held in Boston and at Harvard University to discuss issues of parkway management and preservation techniques. This meeting gave Caltrans and project team members the opportunity to study firsthand, alternative safety and planning tools for managing high speed urban parkways—in particular, Storrow Drive in Boston and Memorial Drive in Cambridge, Massachusetts. Both these parkways exhibit alignment, speed and volume conditions similar to the Arroyo Seco Parkway. Additionally, like the Arroyo Seco Parkway, both are located in a primary watershed and are immediately adjacent to residential districts and recreational facilities. Funding for this research exchange was generously underwritten by the National Trust for Historic Preservation.

UCLA/Occidental College Transportation Study

In the 2001-2002 academic year, the University of California Transportation Research Center in Berkeley funded an analysis of safety and public policy issues for ageing urban parkways, using the Arroyo Seco Parkway as a case study. Undertaken by the Department of Urban Planning at UCLA and the Urban and Environmental Policy Institute at Occidental College, the study analyzed five years of Caltrans statistics to determine if there were any recognizable accident patterns (due to time of day or year, weather, drunk driving, or other factors) that might help better explain the operation and function of the parkway.

The study found a strong correlation between accidents on the Arroyo Seco Parkway and the entry and exit points during peak travel periods—with most accidents occurring within .15 miles of an entry/exit point. The study also found more accidents occur southbound during morning peak hours (between 6am and 8am), that accident rates increase on northbound lanes between 6am and 8am as well, and that intoxication, in general, is not a significant factor. Importantly, the study found the parkway has the highest number of accidents for any facility in Caltrans District 7 (adjusted number of total accidents compared within District 7).

Four locations, in particular, appear problematic: the parkway intersection at Glenarm Street, the curve at Arroyo Seco Park, the segment between Avenue 60 and Avenue 52 southbound, and the Avenue 43 ramp northbound. Problems appear to be associated with a variety of conditions (or combinations thereof) including sight distance, geo-metrics, speed and weaving. Speed in particular, it was noted, was a significant factor in the number of accidents and degree of severity, indicating that the highway's classification as a freeway was wrong. The conclusion was to re-classify the road as a parkway and reduce its speeds commensurate with its original design and intent.

ArroyoWalk

To introduce the visitor to the Arroyo Seco Parkway and corridor Kari Fowler, for her 2002 Graduate Urban Planning Thesis at UCLA, developed “ArroyoWalk,” a linear heritage trail with proposed educational kiosks showcasing the historic, natural and cultural resources of the greater Arroyo.

ArroyoFest

On June 15, 2003 the Arroyo Seco Parkway, for the first time in history, was closed to allow the communities of the Arroyo to experience their Parkway on foot and bicycle. The Sunday event drew several thousand people to the Arroyo and welcomed curious Southern Californians for this unique event. In addition to allowing a closer interaction with the beautiful parkway details and features difficult to appreciate at high speeds, the event also enabled the first phase of community outreach for this plan. Community members were invited by this CMP consultant team to vote on a “logo” design to represent the Parkway and provided information to participate in the future planning process and review of this plan.

1.3 **Applicable Policies**

Statutes and Regulations Mandating Treatment of The Arroyo Seco Parkway

Funding from Federal and State sources require that all identified eligible historic resources be treated using standard preservation guidelines as outlined in this document. As a matter of practice, it is recommended that the unique attributes of the Arroyo Seco Parkway be widely disseminated and recognized to reduce potential funding conflicts or public liability. Resolutions of merit describing the value and attributes of Arroyo Seco Parkway not only reduce potential conflicts, but also allow for flexibility in future planning and management of the resources if compromises need to be reviewed for future public works projects with alternatives.

The National Register of Historic Places

The National Register of Historic Places is maintained by the National Park Service. Listing in the National Register is the principal form of recognition for historic properties in the United States. Historic roads, bridges, buildings and structures and the landscapes associated with historic roads are all potentially eligible for listing in the National Register.

Criteria for Evaluation of Historic Designation, National Register of Historic Places

The National Register has established the following criteria to evaluate the worthiness of properties for listing in the National Register:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association and

- A. that are associated with the events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded , or may be likely to yield, information important in prehistory or history.

Summary of Arroyo Seco Parkway Criteria for Evaluation

Arroyo Seco Parkway qualifies for the National Register of Historic Places under Criterion A in the contexts of transportation planning in the Los Angeles Basin, 1928-1953 and roadway planning and construction from Los Angeles to Pasadena, 1934-1953.

The first fully grade-separated, limited access landscaped Parkway built as a non-toll state highway, it is a direct descendant of early limited access roadways in the Eastern United States and provided the initial link in California's statewide freeway system of grade-separated, limited access urban highways. The Arroyo Seco Parkway represents the earliest expression of the technology for an urban freeway with the construction of the Four Level Interchange, the prototype direct freeway interchange and the original freeway-to-freeway interchange in California. The completion of the Arroyo Seco Parkway determined that future mass transportation development in the Los Angeles Basin would be a regional metropolitan freeway system, having its foundation founded upon the hybrid Arroyo Seco Parkway.

The Arroyo Seco Parkway is significant under Criterion B, Politics and Government, in the context of the development of a regional roadway system through the political process in Southern California, 1936-1953. The successful completion of the Parkway and the later development of a regional freeway system are associated with the professional work of Lloyd Aldrich, Los Angeles City Engineer from 1933 to 1955. In 1928 as Deputy City Engineer in charge of construction under the aegis of Federal Relief Agencies during the Great Depression. Aldrich convinced the City of Los Angeles to undertake the first phase of construction for the Arroyo Seco Parkway, and then enlisted neighboring cities, the County, the State and Federal Government to cooperate and compromise in the route selection to commence construction. While supervising Los Angeles' construction efforts for the Parkway, Aldrich promoted and successfully carried through the concept of a regional freeway system for transportation development in the Los Angeles area.

The Arroyo Seco Parkway is significant under Criterion C, Engineering in the context of the application of innovative and original engineering, later to be associated with early freeway design concepts in Los Angeles, 1936-1953. Recognized as the prototype freeway in California, the Parkway's engineering features served as a design and construction models for later freeways. The Parkway is also significant under Criterion C in the fields of Design/Construction for its bridge and tunnel architecture. Several important architectural styles are exhibited in the structural form and ornamentation of these structures: Art Deco ornament for the Figueroa tunnels, abstract classical and Art Moderne bridge ornament for pre-existing parkway bridges, P.W.A. Moderne for the Works Progress Administration structures built by the Los Angeles Bureau of Engineering, and finally the Modernistic aesthetic demonstrated in the new bridge construction along the Parkway built under the supervision of the State Highway Department. The Arroyo Seco Channel, built concurrently with the Parkway contributes to the significance of the Parkway as a vital undertaking that insured the year-round operation of the roadway free from the danger of flooding.

Integrity – Phase One, Portion Constructed between March 1938 and December 1940

With the exception of the Santa Fe Railroad Bridge, all of the major bridges, constructed before and concurrently with the Parkway have kept substantial integrity in the aspects of location, design, setting, materials, workmanship, feeling and association. Condition is generally good. Maintenance repairs are visible on the roadways and superstructures, but these have not been major impacts.

Integrity - Phase Two, Portion Constructed between October 1940 and December 1943

Portions of the Parkway constructed during Phase Two have lost some integrity. Between 1999 and 2002, extensive construction added a lane to accommodate traffic joining the historic 110 southbound to Los Angeles from off-ramps northbound from the Interstate 5 and southbound connector lanes from the Glendale (2) Freeway joining the 110 freeway approaching downtown. Original rubble walls were destroyed and new light fixtures replaced historic fixtures. Castelar Street Bridge was incorporated into the Hill Street off-ramp and its original configuration is no longer discernible. The construction for Dodger Stadium severely impacted Bishops Road bridges, although the original lower bridge is still discernible and has kept its original dimensions and girder structure.

The Park Row Bridge has kept almost total integrity. It is significant as a structure that conveys the intent of its designers in the State Highway Bridge Department to create a pared-down, unornamented aesthetic felt suitable to a modern Parkway. At the same time bridge designers and engineers respected the dramatic nature of the park setting while emphasizing the bridge's function as a structure unifying parkland. The bridges at Amador and Solano Avenues, as well as the pedestrian under crossing are also substantially unchanged.

Integrity – Phase Three, Portion Constructed between 1931 and December 1953

The Four Level Interchange was determined individually eligible for inclusion in the National Register Of Historic Places as a result of the California Department of Transportation 1986 Historic Highway Bridge Inventory as the first freeway-to freeway interchange in America. In 1996, its integrity was slightly compromised when the columns, formerly scored in a vertical pattern, were encased in steel jackets. The railing of the 2nd and 4th decks were removed and replaced with concrete railing incised with a small modified arch form. The State Office of Historic Preservation made a finding of no adverse effect for this seismic strengthening project. The SHPO review at that time restated the CalTrans determination that the Four Level was individually eligible for the inclusion in the National Register of Historic Places, but restated the CalTrans finding that both the Stadium Way Overcrossing complex and the 1942 Arroyo Seco Parkway Extension were ineligible for the inclusion in the Register. Sunset and Alpine Bridges appear to have kept substantial integrity.

Agreement Documents

When a project may have adverse effects on historic features, an agreement document, usually a Memorandum of Agreement (MOA), will be developed among the consulting parties. Agreement documents for historic features may be complex if they can cover multiple resources and various property types, but standard procedures apply. A Programmatic Agreement (PA) may be appropriate for recurring activities within large landscapes or similar features or for complex or phased projects. For example, ongoing maintenance activities on a historic highway or new alignment across historic districts may warrant a Programmatic Agreement to take the effects of recurring or phased activities into account.

The Department of Transportation Act of 1966

Section 4(f) Considerations

Section 4(f) of the Department of Transportation Act of 1966, 49 USC § 303, is a substantive requirement that prohibits federal approval or funding of any transportation project that requires the “use” of any historic site, public park, recreation area, or wildlife refuge unless there is “no feasible and prudent alternative to the project” and “all possible planning to minimize harm to the project” has been addressed (DOT Act, 1966, Sec. 4[f]). In addition to the direct physical taking of land, the term “use” also includes any indirect effects that would “substantially impair” the value of the protected sites.

When a transportation project involves land that is part of an eligible historic site or district, Section 4(f) is the responsibility of a federal transportation agency, typically the Federal Highway Administration (FHWA), consult the appropriate division of that agency for guidance in Section 4(f) determinations.

The California State Historic Building Code

The State Historical Building Code (SHBC) is unique among state regulations. The authoring of the original SHBC required state agencies promulgating regulations for all construction and resource types to work in harmony with representatives of all design, engineering, and construction disciplines. Caltrans and its Historic Road resources come under the jurisdiction of the SHBC. Case studies of resource types range from historic buildings, to bridges, to landscapes, to trains and automobiles. The result was a totally new approach to codes for historical resources, one that maintains currently acceptable life-safety standards. These regulations are also unique in that they are performance-oriented rather than prescriptive. The provisions of the SHBC are to be applied by the enforcing authority of every city, county, city and county, or state agency in permitting repairs, alterations and additions necessary for the preservation, rehabilitation, relocation, related construction, change of use or continued use of a qualified historical resource.

The authority for use of the SHBC is vested in Sections 18950 through 18961 of the Health and Safety Code. Section 18954 states that the enforcing agency of every city, county or responsible agency shall apply the provisions of alternative codes, engineering standards, building standards, and building regulations adopted by the SHBC Board pursuant to Section 18959.5 in permitting repairs, alterations and additions necessary for the preservation, restoration, rehabilitation, moving or continued use of an historical resource. A state agency shall apply the alternative regulations adopted by the SHBC Board pursuant to Section 18959.5 in permitting repairs, alterations, and additions necessary for the preservation, restoration, rehabilitation, moving, or continued use of an historical resource. However, be aware that in order to use the SHBC, the resource under consideration must be qualified by being designated as an historical resource. Section 18955 states that for the purposes of this part, a qualified historical resource is any structure or collection of structures, and their associated sites or landscape deemed of importance to the history, architecture, engineering achievement, or culture of an area by an appropriate local or state governmental jurisdiction. This shall include structures on

existing or future national, state or local historical registers or official inventories, such as the National Register of Historic Places, State Historical Landmarks, State Register of Historic Places, State Points of Historical Interest, and city or county registers or inventories of historical or architecturally significant sites, places, historic districts, or landmarks. The regulations of the SHBC have the same authority as state law and are to be considered as such. Liability is the same as for prevailing law. The intent of the SHBC is to save California's architectural and engineering heritage by recognizing the unique construction and technical problems inherent in maintaining historical resources and by providing a code to deal with these problems.

In the Spring of 2003, Caltrans District 7 formally requested that the State Historic Building Code Board consider how the State Historic Building Code applies to historic properties like historic roads and bridges. The code is clear that it pertains to all designated historic properties in the State of California, and that all state agencies are subject to the code in treating historic properties under their jurisdiction. It is unclear what specific criteria should be used in the case of structures like roads and bridges, where criteria are determined by highway engineers through such documents as the American Association of State Highway Transportation Officials *Green Book*, the *Manual of Uniform Traffic Control Devices* and various FHWA design manuals.

Although many pieces of historic infrastructure are safe under contemporary driving conditions, they do not meet current standards for highway design. Considered "functionally obsolete," they are being needlessly "improved" by widening, flattening or straightening, when other less drastic and less costly measures, like rehabilitation, sensitive minor modifications and traffic calming, would improve perceived or real deficiencies. A body of information on traffic calming, multi-modal transportation and context sensitive design has evolved over the past decade. The work of such groups as the Congress for New Urbanism, the Surface Transportation Policy Project, the National Trust for Historic Preservation and the Federal Highway Administration under ISTEA and TEA-21, have advanced this new transportation agenda.

Reviews and Appeals, SHBC (SECTION 8-104)

State Historical Building Safety Board (SHBSB). In order to provide for interpretation of the provisions of the SHBC and to hear appeals, the SHBSB shall act as a review body to state and local agencies or any affected party.

Review

When a proposed design, material or method of construction is being considered by the enforcing agency, the agency chief, the building official or the local board of appeals may file a written request for opinion to the SHBSB for its consideration, advice or findings. In considering such request, the SHBSB may seek the advice of other appropriate private or public boards, individuals, or state or local agencies. The SHBSB shall, after considering all of the facts presented, including any recommendation of other appropriate boards, agencies or other parties, determine if, for the purpose intended, the proposal is reasonably equivalent to that allowed by these regulations in proposed design, material or method of construction, and it shall transmit such findings and its decision to the enforcing agency for its application. The Board shall recover the costs of such reviews

and shall report the decision in printed form, copied to the California Building Standards Commission.

Appeals

If any local agency administering and enforcing this code or any person adversely affected by any regulation, rule, omission, interpretation, decision or practice of the agency enforcing this code wishes to appeal the issue for resolution to the SHBSB, either of these parties may appeal directly to the Board. The Board may accept the appeal only if it determines that issues involved are of statewide significance. The Board shall recover the costs of such reviews and shall make available copies of decisions in printed form at cost, copied to the California Building Standards Commission.

City of Los Angeles, Historic-Cultural Monument Ordinance

Historic Preservation Overlay Zones (HPOZ's)

Significant character defining features of Historic Preservation Overlay Zones are found directly adjacent to the Arroyo Seco Parkway. These include streetscapes, neighborhoods, parks, utility poles, street lights and all elements that comprise a cohesive environment, reflective of an historic district with high integrity. Since a stretch of the Arroyo Seco Parkway right-of-way goes through the Highland Park HPOZ, treatment to features within these areas and must be reviewed by the Highland Park HPOZ Board. In addition, should any listed Los Angeles Historic-Cultural Monuments be highlighted as projects in this plan, review by the Cultural Heritage Commission of the City of Los Angeles will be necessary.

Updates to Historic Inventory Surveys

Regular updates to the Historic Inventory of features identified in these guidelines must be planned. It is recommended that updates be made to the Inventory every five years with full field surveys scheduled not more than ten years apart.

Professional Qualifications

Studies and Surveys of any historic features and assessment of character defining features should only be conducted by or under the direction of staff or consultants meeting the Secretary of the Interior's Standards for Professional Qualifications. In many agencies, qualified staff historians, architectural historians, Engineers, Architects, Landscape Architects, Geologists, Geographers, Archaeologists, and Planners work together on interdisciplinary teams as needed. Other professional staff, outside experts or published works, can be consulted for additional expertise as well as reviewing of National Park Service and Office of Historic Preservation websites and publications. Whether work is done in-house, or by consultants working under contract, work must be accomplished or overseen by professionals meeting the Secretary of the Interior's standards in one or more of the appropriate disciplines.

1.4

Definitions and Terminology

Project Terms

-Arroyo Seco Parkway

The recommendations, actions and treatment guidelines outlined in this corridor management plan have been designed and developed for the Arroyo Seco Parkway defined as California State Route 110 beginning at mile-marker 23.69, the intersection of California State Route 110 with US Route 101 (4-level) and continuing northeast to Glenarm Street in Pasadena.

-Viewshed

The viewshed for the Arroyo Seco Parkway is defined the view from the centerline of the parkway to the left or the right and extending to the horizon or ridge line—all elements that can be seen unaided by the human eye.

-Arroyo Seco Parkway National Scenic Byway

The Scenic Byway designation was intended to connect downtown Los Angeles with downtown Pasadena, with the Arroyo Seco Parkway and its viewshed as the connector.

PART 2

RECOMMENDED ACTIONS FOR THE ARROYO SECO PARKWAY AND CORRIDOR

FIGUEROA STREET TUNNELS

The Figueroa Street Tunnels through Elysian Park



2.1

Actions for Restoring and Rehabilitating the Parkway

“The desirability therefore of a few specially agreeable routes of pleasure travel within cities has long been recognized, and experiments in great variety have been tried in the older, larger, and wealthier cities of the world. But most of those experiments were designed to meet the requirements of horse-drawn vehicles, low speed, and a short radius of travel. Therefore, they fall short of meeting the needs of the automobile. More recently some progressive communities have been creating routes deliberately designed upon a regional scale and of a character intended to meet the metropolitan conditions of the automobile age.

--from the Olmsted Bartholomew Plan for the Los Angeles Region, 1930

INTRODUCTION

Preservation, Restoration, Rehabilitation and Reconstruction

While the term “historic preservation” is widely accepted to entail all the actions and activities surrounding the recognition, care and prevention of the loss of the buildings, structures, districts and landscapes of the past, “preservation” also has a more specific definition associated with the nature of work and maintenance at a historic site. In fact, *preservation, restoration, rehabilitation and reconstruction*, terms that tend to get tossed about quite liberally in the world of historic preservation, have very specific meanings and implications for historic resources. It is important to use the appropriate terminology for the activities and actions recommended based on the Secretary of the Interior’s Standards for the Treatment of Historic Properties⁴. These standards refer to how a property will be used, altered, maintained and protected.

-preservation

Preservation applies to properties that are largely intact and reflect the period(s) of significance. This would refer to historic roads and road resources that maintain their original design and materials in good condition. Under preservation, activities and actions associated with the resource are largely focused on maintenance and care.

For the Arroyo Seco Parkway, an example of preservation is the regular sweeping of dirt and debris from the parkway gutters and bridge balustrades.

-rehabilitation

Rehabilitation applies to properties that are largely intact and reflect the period(s) of significance, but may require some repair or alteration. This would refer to historic roads and road resources that maintain their original design and materials in fair condition, or roads and resources requiring modification for safety. Under rehabilitation,

⁴ U.S. Secretary of the Interior’s Standards for the Treatment of Historic Properties, 1995

activities and actions associated with the resource are focused on maintenance, care and sensitive replacement or modification on a limited basis.

For the Arroyo Seco Parkway, an example of rehabilitation is the seismic retrofit and structural upgrade of the parkway bridges.

-restoration

Restoration applies to properties that retain significant components of the period(s) of significance, but may require some repair or alteration, or the removal of features/additions not identified as contributing features. Under restoration, activities and actions associated with the resource are focused on maintenance and care of intact historic features, replacement of lost features, and removal of inappropriate features.

For the Arroyo Seco Parkway, an example of restoration is the return of historic parkway lights.

-reconstruction

Reconstruction applies to properties that are largely beyond repair or have been lost. Under reconstruction the design, appearance and materials of the original road or road features are recreated.

For the Arroyo Seco Parkway, an example of reconstruction is the recasting of the historic parkway lights.

RECOMMENDED ACTIONS

ACTION 2.1-1

Survey and Record Parkway Right-of-way

Conflicting, missing or contradictory records make it nearly impossible to determine the extent of Caltrans property associated with the Arroyo Seco Parkway. Effectively managing and maintaining the parkway and its historic landscape requires an accurate and comprehensive survey to determine the parkway right-of-way lines.

- Review all current maps and plans indicating parkway rights-of-way for consistency.
- Conduct a thorough deed search that includes original parkway rights-of-way, lands transferred, abandoned or relinquished. For areas with unclear or contradictory ownership, establish a formal transfer and establish a recognized right-of-way line.
- Consider maintenance, land use and access issues when determining rights-of-way that need to be reestablished—land more easily accessed and maintained by a park agency, for example.

ACTION 2.1-2

Restore, Reconstruct and Preserve Historic Bridge Features

The historic bridges of the Arroyo Seco Parkway are one of the most prominent and recognizable elements of the parkway. All historic bridge features (balustrades, railings,

piers, abutments, lighting and decorative features) shall be restored, reconstructed, preserved, or recast and installed following the Secretary of the Interior's Standards.

- All existing historic bridge rails or balustrades shall be preserved, missing or replaced historic bridge rails or balustrades shall be reconstructed and reinforced to meet modern crash requirements based on the functional classification of the facility. For historic barriers not meeting modern crash requirements, a box beam barrier constructed along the curb line or a raised curb (which ever meets safety requirements with the minimal visual impact) shall be installed.
- All existing historic bridge lights shall be preserved. All historic bridge lights that have been removed shall be replaced or recast and reinstalled.
- All historic bridge finishes (metallic, natural or painted) that have been altered shall be restored.

ACTION 2.1-3

Develop a Historic Parkway Landscape Master Plan

When first opened in 1940, the Arroyo Seco Parkway was famous for its beautiful roadside plantings. To restore them, as nearly as possible, a Historic Parkway Landscape Master Plan shall be developed for the Caltrans parkway right-of-way that presents an overall design concept based on the 1940 parkway landscape plan. The plan shall outline historic landscape design principles and identify an appropriate plant palate based on historic design precedent, modern hybrids and water use; a demolition plan for redundant irrigation lines, diseased, exotic or inappropriate plant materials; site specific planting plans indicating exact species, quantities, locations, sizes and cultural requirements; and a landscape preservation plan for historic plant communities and features.

- Remove all redundant and abandoned irrigation lines and sprinklers. Analyze the current function of the parkway irrigation system for efficiency, water quality, waste (excessive runoff), coverage, pressure, timing sequence and reliability.
- Identify all remaining original plant materials within the parkway right-of-way and assess their current health, life expectancy and form and shape (natural, mutilated, improperly pruned or trimmed, overgrown or blocking intended views). Remove all damaged, diseased or overgrown (if negatively impacting the parkway landscape) plant materials.
- Identify all non-historic plant materials, groupings and landscape treatments (mulch beds, rock blankets, asphalt or concrete surfaces).
- Identify historic plant materials that meet modern conditions for drought tolerance and highway conditions (exhaust, runoff, wind).
- Identify modern hybrids of historic plant materials that meet modern conditions for drought tolerance and highway conditions (exhaust, runoff, wind).
- Identify new plant materials that replicate in color, form, size and texture historic plant materials that are no longer available commercially or no longer meet the requirements of the roadside environment.
- When considering the use of historic native plant materials the plan shall consider the impacts the construction of the parkway and flood control channel had on

disturbing or destroying the natural environmental systems of the Arroyo (soils, water, air quality). The use of native plant materials shall be considered where the environmental conditions for their successful propagation either remain or can be substantially recreated to provide the essential soil, water and air quality conditions required of the native plant.

- The plan shall identify all trees, shrubs and groundcovers within the parkway right-of-way to be planted or preserved. The master plan should also provide specific recommendations for hard surfaces (rock blankets, asphalt, concrete) based on historic precedent and modern needs for maintenance.
- Replant according to the Landscape Master Plan and using historic plant materials, modern hybrids or new plant materials, the original parkway landscape design.

(See also Action 2.3-1: Develop a Master Landscape Design and Planting Plan for the Arroyo Seco Corridor and Action 2.4-3: Restoration of Native Plant Communities)

ACTION 2.1-4

Recast and Restore All Historic Parkway Light Fixtures



Historic lighting and bridge detail

All historic light fixtures (pole lamps, lanterns and pendants) shall be recast and restored to their original locations as identified by the HAER documentation and historic parkway lighting plans and specifications. In addition to the physical restoration of the historic fixtures, care shall be taken to ensure that the quality of light provided by the restored fixtures matches in quality and color spectrum as nearly as possible that of the original light fixtures.

Historic light fixtures, during the daytime send a strong visual signal suggesting the Arroyo Seco Parkway is different from the freeway system of greater Los Angeles. Night time travelers without the opportunity to discern the landscape and architecture of the region due to the darkness should have a night time clue distinguishing the parkway from the freeway system.

- All Parkway historic light posts, fixture bases and globes, as identified by HAER documentation and the City of Los Angeles Bureau of Streetlighting Survey, should be recast and reinstalled per Los Angeles City Bureau of Streetlights Treatment and Standard for Recasting of Historic Streetlights (where applicable) and US Secretary of the Interior's Standards.
- All galvanized steel light poles and cobra-head lights along the parkway and parkway overcrossings should be removed.
- Secretary of Interior standards shall be consulted in coordination with Illuminating Engineering Society of America (IES) -and California State Historic Building Code regarding light intensity, color and distribution; i.e., light quality should closely match color spectrum of original incandescent light.

- Ornamental portal lanterns for the Figueroa Street Tunnels and tunnel ceiling lamps shall be recast and restored and (due to modern lighting requirements provided through new systems) be illuminated using their original incandescent technology (or modern light offering the same “true” color quality of incandescent) and wattage.
- The use of incandescent-quality lighting should be utilized for all historic and recast parkway lights to distinguish the parkway from the harsh pink and white light of the high pressure sodium currently used throughout the Los Angeles Freeway system. The use of a more “natural” light will wash the parkway with a more calming night time image—thus potentially enhancing the safety of the parkway for the night time driver.

ACTION 2.1-5

Rehabilitation of the Figueroa Street Tunnels



Figueroa Street Tunnels

The Figueroa Street Tunnels are principal character defining features that predate construction of the Parkway and were designed as ceremonial gateway features replete with the Coat of Arms of the City of Los Angeles. The tunnel portals, interiors and approach walls shall be rehabilitated to their original appearance.

- All decorative features such as entry portal lanterns and tunnel pendant lights, interior tunnel materials such as tiled surface, scalloped designed approach retaining walls and pedestrian walks and stairs shall be restored per U.S. Secretary of the Interior’s Standards for Rehabilitation.
- All directional signs affixed to the tunnel portals shall be removed. Further, all signs and sign bridges shall be designed to minimize the visual impact on the arch form of the tunnel.

ACTION 2.1-6

Replace all Informational, Directional and Warning Signs and Sign Hardware on the Parkway

All existing signs, sign posts, sign bridges and hardware within the right-of-way and those directional signs leading to the Arroyo Seco Parkway shall be removed and replaced with a new comprehensive sign and sign mounting system that meets modern guidance for safety and information while respecting the historic character of the parkway.

- Utilize existing inventory of all signs (information, direction, cultural resources, safety, hazard, warning) currently installed along the Arroyo Seco Parkway. Signs should be inventoried based on location, size, mounting hardware (post, sign bridge), letter font, illumination, reflectivity and color.

- Identify all redundant, duplicative or inaccurate signs currently installed along the Parkway.
- Identify all safety, hazard and warning signs required under current state policy or MUTCD guidance.
- Identify locations or sites currently not signed from the Parkway that qualify for directional or informational signs based on current state policy or MUTCD guidance.
- Identify locations or sites currently not signed from the Parkway that should be identified by Parkway signage based on the interpretative and marketing recommendations of this plan.
- For all direction and information signs (excluding all warning, safety, standard route shields) select a secure state and federal approval a sign background color and letter font that reflects, as nearly as possible, the historic parkway character and original sign designs from 1940.
- Design standard posts and sign bridges for all parkway signs based on historic parkway design precedents.
- Develop a comprehensive Arroyo Seco Parkway Design Manual for Signs. Manual will identify design philosophy for all Arroyo Seco Parkway signs, reference all state sign policies and MUTCD guidance, identify all fonts, colors, letter sizes, borders, word spacing, margins and justification, abbreviation standards, spacing, location and hardware mounting. Standard mountings, heights and anchoring for all warning, speed limit, exit, merge and other standard regulatory and informational signs to be provided. Individual designs for every directional and information (location, exit name, destination, attraction, cultural and recreational resources) shall be developed.
- Clearly sign the parkway as “passenger cars only” or “no trucks and busses” and identify the minimum height clearance at appropriate entry points. Remove all height warning signs at all bridges on the parkway—the height notice is not applicable to passenger cars and therefore serves no safety purpose.
- Develop a sign illumination plan for all parkway signs that require nighttime illumination. Illumination schemes shall respect the night sky and minimize upward glare to both the sky and nearby residences.
- Select both color and/or material structures to screen or paint the back of all parkway signs to eliminate reflection and lessen visual impact within the landscape and parkway corridor.
- Investigate modern coatings and finishes, as well as sign placement, to reduce or eliminate graffiti. Minimize the use of all obvious barriers such as fences, razor wire or collars around signs or on sign posts or bridges.

ACTION 2.1-7

Design and Install Gateway, Identity and Visitor Information Signs

Building a culture of appreciation and constituency for the Arroyo Seco Parkway will be dependent of raising the awareness for a resource still routinely referred to as the “Pasadena Freeway” and “the 110.” While small white-on-brown signs identifying the “Historic Arroyo Seco Parkway” were erected in 1993, they are easily overlooked and,

due to their utilitarian design, do little to suggest or impart the history and wonderful legacy of the Arroyo Seco Parkway.

For many users, awareness of and interest in the Arroyo Seco Parkway as a unique historic resource will be dependent on the parkway's clear identification through a comprehensive gateway, identity and visitor information sign program. Identification of, direction to and introduction to the diverse resources of the Arroyo Seco corridor is contingent on the development of a clear, identifiable, consistent and attractive sign system.

Please note that interpretive signs designed and developed to build and awareness and appreciation for the historic, cultural and environmental resources of the corridor are addressed in Section 2.5 (elcoming the Visitor).

- The Arroyo Seco Parkway, in addition to the California State Route 110 shield, should have an easily recognized logo sign/shield distinguishing the road as California's first designated historic parkway. Logo signs should appear adjacent to all "110" shields that identify or direct traffic to the historic designated parkway. The logo should be designed in a style that reflects the history of the parkway and corridor, is legible at the speeds by which parkway drivers' travel, meet appropriate state and federal (MUTCD) sign policies and be of sufficient quality (and copyright restrictions/use and approval) to be used for marketing, promotion and fundraising capacities.
- Gateway signs shall be designed and installed between the four-level interchange and the historic Figueroa Street Tunnels for northbound traffic and at Glenarm Avenue in Pasadena for southbound traffic. The signs shall be designed in a manner to represent both the history of the parkway and the corridor. They shall be of high quality and design and utilize materials reflective of the corridor's design heritage; e.g. arroyo rock, tile, aluminum, and concrete. The signs shall not be considered a component of the parkway's "official" directional, information or warning sign system to allow greater design flexibility—freeing the gateway signs of many of the requirements of MUTCD. The signs shall note "Historic Arroyo Seco Parkway" and include the parkway logo. At the beginning of the historic parkway at a simple sign stating "Entering Historic Arroyo Seco Parkway" with the parkway logo/shield shall be erected.
- A comprehensive inventory of all signs providing direction to the historic designated Arroyo Seco Parkway shall be conducted.
- All directional signs within greater Los Angeles (Caltrans, LADOT, and local DOTs) that provide direction to the Arroyo Seco Parkway shall consistently reference the name as the Arroyo Seco Parkway, through the use of the California State Route 110 shield *and* parkway logo. In instances where the "Pasadena Freeway" is specifically identified as a term on signage, such references shall be replaced with "Arroyo Seco Parkway." This action will eliminate confusion with references to the "Pasadena Freeway." Additionally all non-specific references shall be changed from "Freeway" to "Parkway" (such as the signs at the entrance ramps).

ACTION 2.1-8

Planning and Construction Public Information Signs

In order to keep the general public informed and interested in the Arroyo Seco Parkway and Corridor planning and restoration efforts, public information signs for the planning, implementation and construction phases and projects should be installed along the parkway. Rehabilitation of the Arroyo Seco Parkway according to the recommendations and guidance in the Corridor Management Plan will cause inconveniences to the traveling public. By being proactive and letting the traveling public know that the inconveniences are for a better parkway, much public complaint and frustration can be minimized or even eliminated.

- Identify a “1-800-PARKWAY” phone number and website for information on parkway projects, construction updates, maintenance activities and special events. The phone number or website should offer a menu offering general topics on “Construction and maintenance on the parkway,” information on the “National Scenic Byway” designation and “Special Events”.
- Develop a special logo, character, or symbol associated with parkway restoration, rehabilitation and reconstruction.

2.2

Actions for Building a Safer Parkway

“The issue of safety is of paramount importance. It must be addressed by the preservation community in order to advance the preservation of historic roads....The preservationist must learn to look for new and creative ways in which safety can be both properly assessed and accommodated in a historic environment.

--Paul Daniel Marriott, Saving Historic Roads



Highway safety and historic preservation need not be mutually exclusive ideas. In fact, if properly understood and executed with modern technology and devices, preservation of historic road features can enhance a safe driving environment. This plan identifies management and infrastructure strategies to improve the safety and general function of the Arroyo Seco Parkway.

As an historic resource, the Arroyo Seco Parkway possesses features and design characteristics that are unique to the Los Angeles basin. While generally viewed as a segment of the Los Angeles freeway system, the parkway must be recognized and evaluated as an independent transportation facility. Only through such an understanding and associated analysis can the options for improved efficiency and safety be fully gauged.

Increasingly communities across the United States are recognizing that the safety and efficiency of historic roads can be significantly enhanced if the origins of their design, intended uses and original technologies are evaluated within the context of modern advances in highway engineering. Rehabilitation of historic parkway design features and environmental setting, when viewed holistically, can offer non-traditional and innovative solutions that have been unattainable through traditional approaches to freeway management.

An Analysis of Geometric Design of the Arroyo Seco Parkway

The following analysis was developed by Glatting Jackson Engineers. It evaluates the geometric design and safety concerns of the Arroyo Seco Parkway and recommends roadway and operations modifications to improve safety while enhancing the historic character of the road. The Arroyo Seco Parkway operates at speeds that greatly exceed

accepted safety design standards. There are design, operations and benign issues that contribute to safety problems. This analysis discusses these issues and proposes lowering the posted speed limit, converting the outside travel lanes into auxiliary lanes, and implementing arterial traffic calming measures as solutions to the safety problems.

Design Speed of Horizontal Curves

Using project plans for construction of utilities along the Arroyo Seco Parkway dated July 1999 provided by Caltrans, the design speed of horizontal curves on the Arroyo Seco Parkway from Pasadena Avenue to Orange Grove Avenue, a distance of approximately 6.8 miles, were calculated. The utility plans show the corridor alignment to scale, but do not detail the point of curvature, point of tangent or the radius of curvature of the roadway alignment. Therefore, the point of curvature and point of tangent were estimated and used to determine the cord and tangent length for simple curves. For compound curves, the point of curvature and point of tangent were estimated and used to measure the radius directly.

The utility plans do not provide the superelevation (e) or the coefficient of friction (f). Research on the roadway states that the road was not superelevated. Superelevation and coefficient of friction were estimated using available data and engineering judgment.

Equations used:

T = Tangent length

C = Cord length

R = Radius

Δ = Deflection Angle

e_{\max} = Superelevation

f_{\max} = Coefficient of friction

$$\text{COS}(\Delta/2) = (.5 * C) / T$$

$$R = T / (\tan (\Delta/2))$$

$$\text{Design Speed (MPH)} = (R * 15 * (e_{\max} + f_{\max}))^{.5}$$

Table 1: Design Speed of Horizontal Curves

Curve Number (west to east)	Location	Calculate Radius				Calculate Design Speed of Horizontal Curve		
		Cord Length (m)	Tangent Length (m)	Deflection Angle/2	Radius (m)	e _{max} (assumed)	f _{max} (assumed)	Design Speed of Horizontal Curve (mph)
1	Approx. 150 m east of Pasadena Ave.	1770	946	0.59	3094	0.04	0.15	52
2	Approx. 50 m west of 43 Ave eastbound off ramp	1700	860	0.55	3048	0.04	0.15	51
3	At 43 Ave westbound on/off ramp	1060	550	0.57	1875	0.04	0.15	40
4	Approx. 500 m east of Ave 45	620	320	0.57	1100	0.04	0.15	31
5	Approx. 900 m east of Ave 45	820	420	0.56	1460	0.04	0.15	36
6	At Ave 52	1420	720	0.55	2542	0.04	0.15	47
7	Approx. 450 m east of Ave 56	2600	1390	0.59	4545	0.04	0.15	63
8	Approx. 250 m east of Shults St eastbound on/off ramp	1130	590	0.58	1994	0.04	0.15	42
9	At BNSF R.R. crossing (compound curve)				1960	0.04	0.15	41
10	At BNSF R.R. crossing (compound curve)				1550	0.04	0.15	37
11	At Marmion Way	1400	940	0.74	2441	0.04	0.15	46
12	Approx. 1800 m east of Marmion Way	720	360	0.54	1300	0.04	0.15	34
13	At Salonica St	1060	540	0.56	1893	0.04	0.15	41
14	At Crescent St	1210	620	0.56	2154	0.04	0.15	43
15	Approx 1200 m east of Hough St	840	430	0.56	1496	0.04	0.15	36

Note: Estimates based on scaled utility construction plans provided by Caltrans dated July 1999.

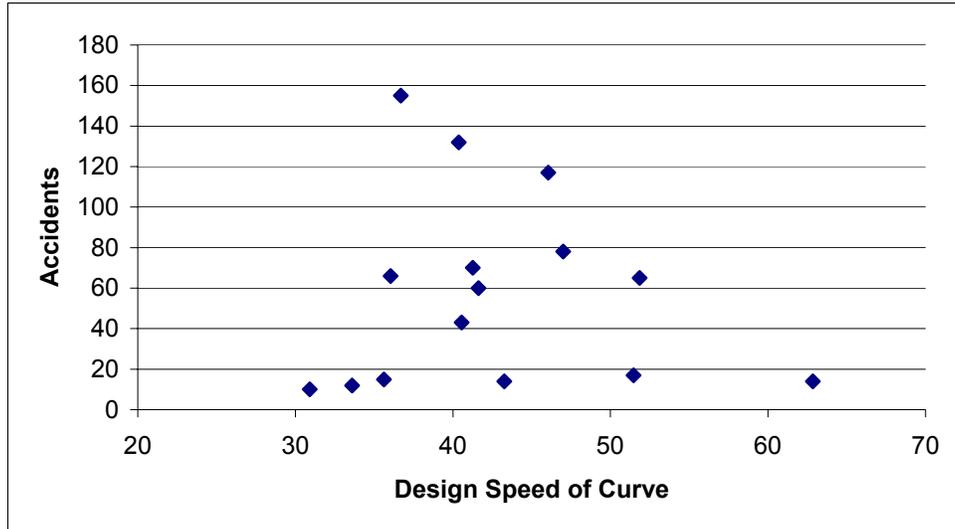
Of the horizontal curves evaluated, the mean design speed is estimated at 43 miles-per-hour (mph), with the minimum design speed for a horizontal curve estimated at 31 mph and the maximum design speed for a horizontal curve estimated at 63 mph.

The roadways original posted speed limit was 45 mph. The current posted speed limit for most of the corridor is 55 mph. Based on today's standards, only 1 of the 15 curves evaluated is designed for speeds over 55 mph. Based on today's standards, 5 of the 15 curves evaluated are designed for speeds over 45 mph., and 5 of the 15 curves are designed for speeds between 31 and 37 mph.

Recommended Posted Speed

Crash data was estimated for each horizontal curve by correlating the crash information per mile-post presented by Dr. Anastasia Loukaitou-Sideris, at UCLA, with the corresponding station identified in the project plans for construction of utilities provided by Caltrans. Figure 1 and Table 2 compare the number of crashes that occurred between 1996 and 2000 at each curve evaluated in relation to the design speed of the curve. The figure shows that, in general, there are relatively lower accident rates for both low design speed curves (those under 40 mph) and high design speed curves (those over 50 mph) when compared to the accident rates for curves with design speeds between 40 and 50 mph.

**Figure 1: Design Speed of Curve Vs. Crashes
(1996 – 2000)**



Source: Anastasia Loukaitou-Sideris, professor at UCLA, Glating Jackson

**Table 2: Design Speed of Curve Vs. Crashes
(1996 – 2000)**

	Design Speed of Curve		
	30-39	40-49	50 or greater
Number of Curves	5	7	3
Average Number of Crashes	52	73	32
Median Number of Crashes	15	70	17
Average Crashes per ADT	0.0005	0.0007	0.0002
Median Crashes per ADT	0.0001	0.0006	0.0001

Source: Anastasia Loukaitou-Sideris, professor at UCLA, Glattig Jackson

A possible explanation for the apparent relationship between lower design speeds and lower crash rates may be that drivers perceive these curves as dangerous and approach them at lower speeds. Drivers may not be able to read the design speed for curves with design speeds of 40 to 49 mph, and therefore approach these curves higher speeds. The posted speed limit of 55 mph may also give drivers a false sense of security in approaching these curves at higher speeds.

Under current design standards, the American Association of State Highway & Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets recommends that the posted speed of an arterial or limited access roadway be five to 10 mph less than the minimum design speed. Based on this commonly accepted safety practice, the design speed of the horizontal curves and accident data presented above, the current posted speed is not consistent with the roadway design.

If the posted speed was 5 to 10 mph below the minimum design speed, then the parkway's posted speed limit should be 30 mph because over half of the curves have design speeds below 42 mph.

Due to the past speed limits on the Arroyo Seco Parkway, a 30 mph speed limit would likely be unacceptable to the public despite the obvious safety benefits and consistency with accepted safety practices. A speed limit of 40 mph would reduce the number and intensity of crashes, be in better conformity to safe design practices, and be acceptable for a parkway (i.e., not freeway).

On-Ramp and Off-Ramp Design

Based on the traffic analysis conducted by Anastasia Loukaitou-Sideris, professor with UCLA, many of the crashes are concentrated around the on-ramps and off-ramps. Table 3 presents the accident data, design speed of curves and proximity to on-ramps and off-ramps. Of the four curves with the highest number of crashes, three are near an on and/or off ramp.

Table 3: Crashes, Design Speed of Horizontal Curve and Ramp Location (1996 – 2000)

Curve Number (west to east)	Location	Design Speed of Horizontal Curve (mph)	Number of Crashes on Arroyo Seco along curve (1996 – 2000)	Crashes per ADT 2000	Near on or off ramp
1	Approx. 150 m east of Pasadena Ave.	52	65	0.00035	no
2	Approx. 50 m west of 43 Ave eastbound off ramp	51	17	0.00009	yes
3	At 43 Ave westbound on/off ramp	40	132	0.00102	yes
4	Approx. 500 m east of Ave 45	31	10	0.00008	no
5	Approx. 900 m east of Ave 45	36	15	0.00012	no
6	At Ave 52	47	78	0.00063	yes
7	Approx. 450 m east of Ave 56	63	14	0.00012	no
8	Approx. 250 m east of Shults St eastbound on/off ramp	42	60	0.00056	yes
9	At BNSF R.R. crossing (compound curve)	41	70	0.00065	no
10	At BNSF R.R. crossing (compound curve)	37	155	0.00149	no
11	At Marmion Way	46	117	0.00113	yes
12	Approx. 1800 m east of Marmion Way	34	12	0.00012	no
13	At Salonica St	41	43	0.00051	yes
14	At Crescent St	43	14	0.00016	no
15	Approx 1200 m east of Hough St	36	66	0.00078	yes

Source: Anastasia Loukaitou-Sideris, professor with UCLA, Glatting Jackson

**Table 4: Curve, Design Speed and Number of Crashes
(1996 – 2000)**

	Curves Near On/Off Ramp	Curves Not Near On/Off Ramp
Number of Curves	7	8
Average Design Speed	43	42
Median Design Speed	42	39
Average Number of Crashes	73	44
Median Number of Crashes	66	15

Table 4 shows that there while there is little difference in the average design speeds of the curves between these two categories, there is a large disparity in the number of crashes. Significantly greater crashes occur near and in horizontal curves located near on-ramps or off-ramps. The existing on-ramps and off-ramps require vehicles to slow down to very low travel speeds while on the Arroyo Seco Parkway, causing a large differential in travel speeds among vehicles in the outside travel lanes and causing high speed weaving from the outside travel lane into the center travel lanes. This safety problem could be helped by converting the outside thru travel lanes to auxiliary lanes, allowing the introduction of appropriately sized acceleration and deceleration lanes for the on-ramps and off-ramps, respectively.

Based on a posted speed of 40 mph, the recommended design speed for the roadway is 50 mph. For a highway design speed of 50 mph, the ramp design speed should be between 35 and 45 mph (AASHTO – Geometric Design of Highways and Streets 1990, p. 960).

The following is a preliminary estimate of the required length of acceleration and deceleration lanes at each intersection. Calculating the precise length of the acceleration and deceleration lanes requires information on slopes of the roadway and ramps as well as the design speed of the exit curve and would be completed during preliminary or final engineering design.

Table 5: Estimated Acceleration Length

Highway Design Speed, V (mph)	Speed Reached at end of acceleration area, Va (mph)	Acceleration Length (ft) for Entrance Curve Design Speed (mph)								
		Stop Condition	15	20	25	30	35	40	45	50
50	39	720	660	610	550	450	350	130	-	-
45	35	560	490	440	380	280	160	-	-	-

Notes: assumes flat grades of 2 percent or less.

Sources: AASHTO – Geometric Design of Highways and Streets 2001, p. 851

Table 6: Estimated Acceleration and Taper Length

Highway Design Speed, V (mph)	Speed Reached at end of acceleration area, Va (mph)	Acceleration and Taper Length (ft) for Entrance Curve Design Speed (mph)								
		Taper assumed to be 1':25' (for 12' travel lane, taper of 300 ft)								
		Stop Condition	15	20	25	30	35	40	45	50
50	39	1020	960	910	850	750	650	430	-	-
45	35	560	790	740	680	580	460	-	-	-

Notes: assumes flat grades of 2 percent or less.

Table 7: Estimated Deceleration Length

Highway Design Speed, V (mph)	Average Running Speed on Exit Curve, Va (mph)	Deceleration Length (ft) for Design Speed of Exit Curve (mph)								
		Stop Condition	15	20	25	30	35	40	45	50
50	44	435	405	385	355	315	285	225	175	-
45	40	385	350	325	295	250	220	-	-	-

Notes: assumes flat grades of 2 percent or less.

Sources: AASHTO – Geometric Design of Highways and Streets 2001, p. 855

Table 8: Estimated Deceleration and Taper Length

Highway Design Speed, V (mph)	Average Running Speed on Exit Curve, Va (mph)	Deceleration Length and Taper (ft) for Design Speed of Exit Curve (mph)								
		Stop Condition	15	20	25	30	35	40	45	50
		Taper assumed to be 1':25' (for 12' travel lane, taper of 300 ft)								
50	44	435	705	685	655	615	585	525	475	-
45	40	385	650	625	595	550	520	-	-	-

Notes: assumes flat grades of 2 percent or less.

Table 9: Estimated On-Ramp and Off-Ramp Acceleration and Deceleration Lengths

(Highway Design Speed assumed to be 50 mph)

Ramp	Assumed Design Speed of Exit Curve (mph) (assumed)	On-Ramp Acceleration and Taper Length (ft)	Off-Ramp Deceleration and Taper Length (ft)
Avenue 36 Westbound Ramp	5	1020	435
Avenue 43 Eastbound Ramp	15		705
Avenue 43 Westbound Ramp	15	960	705
Avenue 52 Eastbound Ramp	20	910	685
Avenue 52 Westbound Ramp	20	910	685
Herman Ave Eastbound Ramp	20	910	685
Avenue 57 Westbound Ramp	5	1020	435
Shults St Westbound Ramp	5	1020	435
Avenue 60 Eastbound Ramp	5	1020	435
Marmion Way Eastbound Ramp	20		685
Avenue 66 Westbound Ramp	5	1020	
Saloncia St Westbound Ramp	5	1020	435

Notes: assumes flat grades of 2 percent or less and highway design speed of 50 mph.

Capacity Analysis of 4 vs. 6 Lanes

The Arroyo Seco Parkway is located in a highly urbanized area. The Arroyo Seco Parkway connects downtown Los Angeles to the City of South Pasadena and the City of Pasadena and serves a number of parks, cultural destinations and historic communities along the corridor. Therefore, it is a significant piece of the transportation system for the community and the region. Part of designing and implementing the recommended safety enhancements (reduction in posted speed and introduction of auxiliary lanes) will require quantifying the change in vehicular capacity in the corridor.

The first step in calculating the change in vehicular capacity is to quantify the existing capacity of the corridor. Available generalized tables or more detailed modeling techniques, such as Synchro or CORSIM, will not provide an accurate quantification of the existing capacity of the Arroyo Seco Parkway due to the unique design of the roadway. Due to the unique design of the roadway, the roadway's existing capacity is lower than the capacity estimate presented in generalized tables. The outside and center travel lanes have a much lower capacity than estimated by the generalized tables due to the following roadway characteristics:

- Design of on-ramps and off-ramps. The current ramp configurations force vehicles to reduce their travel speed or enter the roadway at speeds under 10 mph at many locations. The ramp configuration impacts the capacity of the outside lane by forcing through vehicles to reduce their travel speeds. The ramp configuration impacts the capacity of the center lanes by introducing weaving movements of vehicles avoiding slow moving entering or existing vehicles.
- Queues. In peak times, queues extend onto the Parkway itself, eliminating the use of the right-hand lane entirely for through vehicles. This also causes a great deal of weaving to and from the center lane.
- Spacing of ramps. The proximity of the ramps leads to an overlap of acceleration and deceleration areas for adjacent ramps, introducing a large number of weaving movements into the center lane in these areas and significantly reducing the travel speed in the outside lane.
- Horizontal curves: The design speed of horizontal curves along the corridor range between 31 and 63 mph. When the corridor is near capacity, the travel speed along the corridor will be controlled by the speeds at the curves. Vehicles will reduce travel speed at the curves. The reduction in travel speeds at curves will cause a domino effect downstream of the curve, forcing vehicles to slow down downstream of the low design speed curves.

Due to the unique character of the roadway, it will be necessary to observe and quantify travel characteristics on the Arroyo Seco Parkway. These characteristics should be quantified both peak and off peak periods, since the characteristics of the roadway will impact traffic flow differently during congestion and free flow conditions. Intuitively, when a queue backs up into the right-hand lane and blocks the lane, the lane no longer contributes to the capacity of the Parkway. Furthermore, the unexpected blockage of the right lane leads to weaving into the center lane at various speeds, reducing the center

lane's capacity as well. Consequently, a specific model of the corridor to see what the "effective capacity" during peak periods should be undertaken. Data to collect include:

- Vehicular volumes per lane (peak and off-peak). This will help quantify how traffic is distributed across the three lanes to obtain a utilization factor per lane during peak and off-peak conditions. Since the corridor is assumed to function at capacity during peak conditions, measuring the traffic volumes per lane will provide a reliable estimate of existing lane capacity for the roadway. This should be done at several locations, including those that have queues that affect the right-hand lane of the Parkway.
- Weaving movements upstream and downstream of intersections (peak and off-peak). This information can be used to complete a weaving analysis to quantify the impact of weaving on the capacity of the outside and center lanes. Quantifying weaving movements also provides a good indicator for potential vehicular conflicts per hour, which is related to crash rates.
- Travel speeds (peak and off-peak). The roadway is assumed to function at capacity during peak conditions. Therefore, vehicles are not traveling at free-flow speeds, but rather by the speeds dictated by vehicular volumes and roadway characteristics (lower speed horizontal curves, ramp design and ramp spacing). Calculating travel speeds at multiple points along the corridor during peak periods will document whether the reduction in posted speed will have an impact on capacity or travel time during the peak period. If travel speeds are lower than the recommended posted speed, the change in posted speed will have no impact on capacity or travel time during the peak periods, when level-of-service and delay are measured. A correlation of design speed, crash data and travel speed during the off-peak period will allow an analysis to be conducted on the safety implications of reducing the travel speed and employing arterial traffic calming measures to reduce travel speeds.
- Collisions. Collisions block lanes and cause slow downs that reduce the capacity of the Parkway. These delays are unpredictable, and therefore tend to be more disruptive and frustrating to motorists than predictable delays caused by commuting patterns. With lower speeds and auxiliary lanes, the number of collisions should drop dramatically. Thus, the capacity of the Parkway will benefit. Consequently, an estimate of the reduced delay derived from eliminating many collisions would be helpful. More importantly, the reduced number of collisions is key because public safety is a key transportation objective.

The capacity of the recommended roadway design and operation should be determined and compared to the existing roadway capacity. The analysis should assume that the right hand lane is used only for queuing, acceleration, deceleration, and merging. Also, assume that the center and left lanes are through lanes. Intuitively the recommended roadway configuration will flow more smoothly and more safely. The proposed roadway design will also work more efficiently, having a higher per lane capacity than the current roadway design. Auxiliary lanes will allow the outside lane to function safely and more efficiently, reducing speed differential of entering and exiting vehicles and reduce weaving into adjacent lanes. They would also accommodate queues

during peak periods, allowing travel flow on the through lanes and helping the capacity of the center lane by avoiding the dangerous and low-speed weaving problems. Modeling techniques, such as Synchro or CORSIM, may be useful in estimating future roadway capacity.

In addition to reducing the posted speed and adding auxiliary lanes, additional benefits can be obtained by making other design modifications. Over time, the Parkway has been altered to look more like a freeway than a parkway. The alternations involve signage, median treatments, and edge treatments. It is recommended that these and perhaps other components of the parkway design be modified to look like a parkway. The benefits will create a softer, less freeway appearance, which will reinforce the lower speed limit. In other words, the freeway look would no longer contribute to the driver expectation of being able to drive at freeway speeds. The idea is to change the appearance of the parkway so that it reads as a parkway and that drivers' expectations will shift towards speeds that are slower, safer and more suitable to a parkway. Samples of changes could include removal of the chain link fences, improving views/vistas, landscaping the edges and medians, median barrier alterations, replacing the signage with parkway signs, and regular maintenance on the Parkway.

RECOMMENDED ACTIONS

ACTION 2.2-1

Reduce Posted Speed

The Glattig Jackson analysis demonstrates that the Arroyo Seco Parkway is posted at a speed that cannot be justified by its geometric design. Therefore a reduction in posted speed, that will improve safety and function, should be determined and agreed upon by all necessary agencies. (*the Glattig Jackson report recommends a posted speed of 40mph*)

- Review existing speed data, or collect new speed data to determine average parkway speeds during both peak hours and off hours.
- Calculate travel speeds at multiple points along the corridor during peak periods to document whether the reduction in posted speed will have an impact on capacity or travel time during the peak period and correlate the findings with crash data and travel speed during the off-peak period.
- Identify enforcement requirements or intelligent transportation systems for speed monitoring/reduction/enforcement along the parkway.
- Calculate the cost-benefit of lower speed in accident/fatality reductions along the parkway through liability, police, fire and rescue, lost travel time and maintenance or repair expenditures.
- Conduct, in conjunction with the parkway advocacy organization, an awareness campaign for lower speeds along the Arroyo Seco Parkway bringing about broad-based support for enhanced safety *and* mobility in the corridor.

ACTION 2.2-2

Conduct a Comprehensive Plan to Investigate the Creation of Auxiliary Lanes

Due to the lack of acceleration and deceleration lanes on the Arroyo Seco Parkway, entrances and exits to the parkway do not meet current recommended safety design practices. To improve safety during peak hours, a comprehensive analysis should be conducted into the conversion of the outside lane to service as an acceleration and deceleration lane allowing improved opportunities for entering vehicles to reach posted speeds and exiting vehicles to properly slow before entering the residential neighborhoods immediately adjacent to the parkway.

- Investigate current accident rates associated with entry and exit movements and stacking in the travel lane (and associated weaving) during peak hours.
- In areas where the auxiliary lane does not serve an acceleration/deceleration or stacking function and serves as a breakdown or shoulder, remove the safety pullouts.
- Analyze weaving movements during both peak and off-peak hours to determine if the current entry and exit configurations cause an increase in weaving activity.
- Sign the right lane as “Exit Only” on parkway directional signs.

ACTION 2.2-3

Improve Safety and Function of Figueroa Street Tunnels

Due to the sharp curve of the entry ramp to northbound Interstate 5 (Golden State Freeway) from the Arroyo Seco Parkway, persistent stacking occurs on the inside (far left) lane of the parkway as traffic must slow to exit. This stacking situation is further complicated by motorists, familiar with the parkway and the exit configuration, who utilized the number 2 lane to bypass the stacked vehicles and merge into the inside lane nearer to the exit. The resultant weaving in the number 2 lane is made more dangerous due to the fact that this situation is occurring through the Figueroa Street Tunnels—the contrast between the three dimly lit tunnels with bright sunlight between during the daylight hours is a hazard that should be carefully considered.

- Develop a comprehensive study investigating options to improve the northbound entry to Interstate 5 from the Arroyo Seco Parkway. Such a study should address the geometrics of the entry ramp configuration, compare accident rates between daylight hours and nighttime hours, the lost efficiency and capacity for northbound parkway travelers due to the weaving approaching the exit and consider relevant traffic flows and capacity on northbound Interstate 5.
- Consider issues of traffic enforcement, restricted access or barriers better channeling traffic exiting to northbound Interstate 5 at an earlier and safer location, or alternate entry points to northbound Interstate 5.

ACTION 2.2-4

Develop a Comprehensive Parkway Safety Barrier Plan

While the original design for the Arroyo Seco Parkway had limited guardrails and barrier walls, modern safety practices and current parkway use dictate their need in a number of key locations. While prudent safety analysis cannot be overlooked, and this plan does recommend the installation of new and additional barriers, the design and appearance of new barriers must be carefully selected in a manner that respects the design integrity and intent of the original parkway.

- Determine, based on standard engineering practices, AASHTO guidance and parkway function the exact locations and crash requirements for center and side barriers along the parkway and all entry and exit access roads within the right-of-way. Differences in crash requirements (an access road vs. the parkway) shall be clearly noted.
- Hire a landscape architecture/historic preservation consultant to develop comprehensive barrier recommendations that meet both engineering and safety requirements and the aesthetic and historic preservation needs of the historic parkway. This plan shall identify specific barrier types, colors, designs (aesthetic and structural), finishes and end treatments and identify the exact location for each barrier type based on both engineering and aesthetic considerations.
- Barrier designs recommended shall include a steel-reinforced white painted post and rail similar to the historic post and rail barrier installed in 1940, concrete median and sidewall barriers that reflect either the streamline moderne characteristics of the original parkway design or the “crazy” rock facing of original parkway retaining walls, and a visually non-obtrusive barrier (such as a box beam). Specific safety, historic preservation and landscape setting justification shall be provided for each barrier type and recommended location and careful consideration shall be made for the joints, transitions and attachments between different barrier types.
- Caltrans District 7 staff shall actively participate in the consultant process on the barrier selection and design process; Caltrans shall design the construction and site plans required for installation.



Historic wooden guardrails, Fair Oaks ramp



Redesigned “historic look” guardrail, Historic Columbia River Highway



Columbia River Highway guardrail with steel-backing to meet federal crash tests requirements



Box beam barrier, Washington, DC



Concrete reinforced, stone-faced barrier wall, Kona, Hawaii

ACTION 2.2-5

Develop a Comprehensive Parkway Safety Plan for Caltrans Staff

While many of the physical improvements recommended in this plan have been designed to enhance the safety of the motoring public or residents and park users, it must also be remembered that Caltrans maintenance, traffic and survey workers encounter some of the highest risks while undertaking day-to-day maintenance and management activities within the parkway right-of-way.

- Identify high risk activities associated with day-to-day maintenance and management activities.
- Install small, visually non-obtrusive variable message signs at principal parkway entry points and at regular intervals along the parkway to provide advanced motorist warning for emergency road work.
- Review all parkway plans to ensure that new project proposals and maintenance activities minimize hazards to Caltrans employees.

2.3

Actions for Building a Landscape Framework

“...On a cliff overlooking an unspoiled natural park, the famed Arroyo Seco, with a perennial stream and groves of magnificent trees, rocks, cliffs, and acres of boulders, wide stretches of oak-dotted sward, and the snow-capped mountains closing every vista.”

--University of Southern California, College of Fine Arts bulletin, c.1900



The Arroyo Seco corridor represents one of the most distinctive environmental systems in the Los Angeles Basin. It is the purpose of this plan to outline the characteristics of a corridor landscape—the general look and feel of the historic and natural landscape that is still visible in many segments. The landscape framework will direct all plantings and landscape management

decisions within the right-of-way of the Arroyo Seco Parkway and will be recommended and made available to other land management agencies, planning bodies and interested residents within the Arroyo Seco corridor.

The quality of a place’s physical setting—its landscape—is the principal feature by which a place is recognized or appreciated, and understood as a distinct district or region. Big Sur, Elysian Park and Pershing Square are easily recognized landscapes in California that each have common elements and unique characteristics (natural or built). Similarly, the Arroyo Seco Parkway occupies a distinctive landscape with many features and elements unique (in their arrangement) to the greater Los Angeles basin.

[BOX]

What is a Landscape?

What constitutes a natural landscape, a cultural landscape or a designed landscape? The term “landscape” is broadly used and has many meanings depending on location or region—even the profession of the individual defining the “landscape” may influence the nature of its characterization. As a general rule, landscapes are influenced by the amount of influence or interaction they have had with human activity—a wilderness having no interaction with humans compared to a city playground designed to have intensive engagement with humans (very active children).

The cultural landscape defines the patterns, design and structure of a landscape influenced, altered or changed by human activity. Hallmarks of a cultural landscape may include the size and shape of fields and groves, the characteristic layout of communities or the nature of the transportation network. Cultural landscapes are generally not

designed by a master landscape architect or planner, but may be “designed” or influenced by the traditions or goals of social, religious or ethnic groups.

A designed landscape represents the work of a professional landscape architect, artist or planner that was consciously created to provide a specific experience or sequence of experiences for the visitor or traveler. Public parks, gardens, campuses and parkways are examples of designed landscapes.

[END BOX]

Traveling north from downtown Los Angeles the Figueroa Street tunnels piercing Elysian Park provide a strong symbolic gateway element heralding the beginning of the parkway. The parkway then travels largely through the Arroyo Seco valley—a distinct landscape with gentle hills rising from both sides of the Arroyo Seco and the parkway. Even when the parkway and the Arroyo Seco diverge in South Pasadena the parkway continues through a “valley-like” corridor passing through the “cut” created when the parkway was being constructed in the late 1930s. Thus for most of its length, the parkway, due to the rising lands on both sides, has a strong sense of *enclosure*.

Within this generalized landscape framework are smaller segments or “rooms” which have distinctive features and qualities—Sycamore Grove Park or the “Cut,” for example. At the larger scale, the views of the snow-capped San Gabriel Mountains or the shimmering towers of downtown Los Angeles provide distant views and help to “anchor” the parkway in the larger landscape of the region. Combined, these features define the general landscape character of the Arroyo Seco Parkway.

The Historic Parkway Landscape

Originally, 47 types of plants were selected or propagated for the original parkway landscape plan. Forty-two species were native varieties, which included 11 kinds of ceonothus. Flowering shrubs were the predominant plant form, followed by flowering vines. Only three trees were noted--coco palm, sycamore and toyon. The coco palm were specified for planting in the median adjacent to local highway overcrossings. The sycamore are found primarily in the parkland adjacent to the parkway, while the toyon are located on the sloped embankments in the cut leading from the arroyo into Pasadena. It is difficult to ascertain whether the toyon were intended to be large shrubs, or the small trees that they are today.

The Current Parkway Landscape

The current parkway landscape has evolved both by design and through lack of adequate maintenance resources. Newer hardier species replaced native plant materials that could not adapt to the “new” environmental conditions of the recently constructed parkway shortly after the parkway opened. Site specific planting schemes and plant materials have been designed and implemented in numerous locations in response to lost or overgrown plant materials, “beautification” projects at entry and exit points or routine landscape maintenance. While many projects have been well executed, the overall lack

of landscape coordination and a comprehensive “look” respecting the historic parkway planting plan and plant communities of the native environment has been largely overlooked and probably not funded to an adequate level for overall integration.

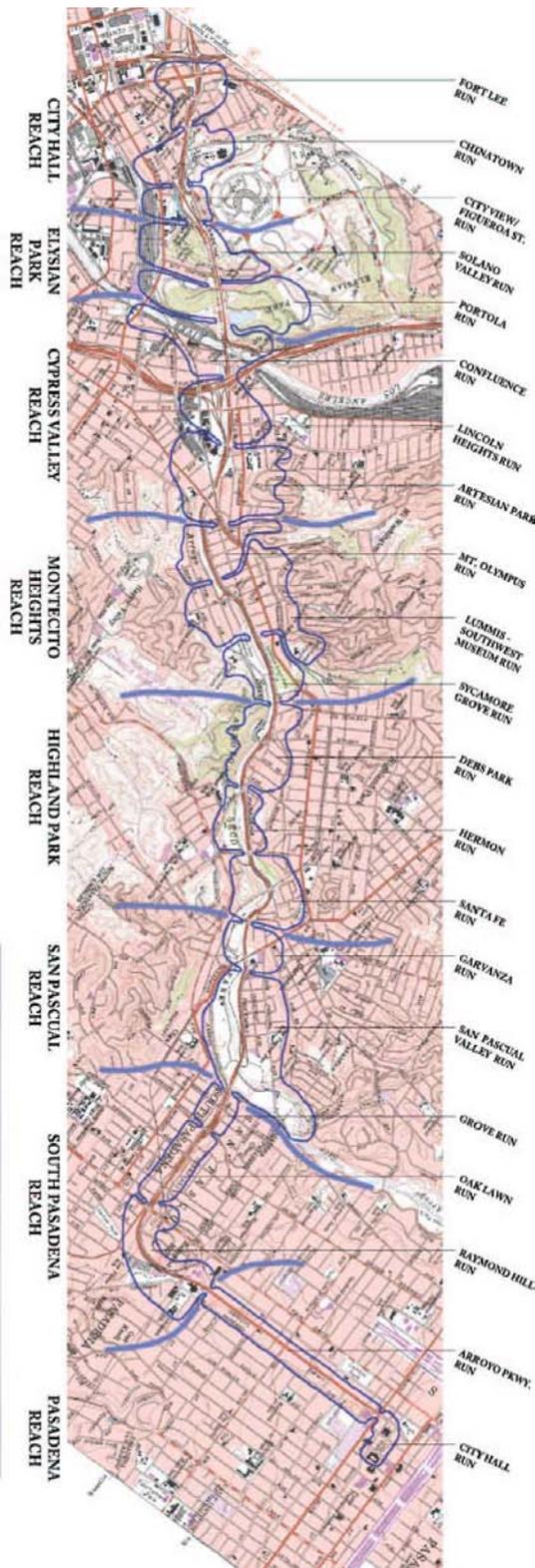
In comparing the original plant palette, which heavily favored native flowering shrubs, with the current plant palette, several interesting observations can be made:

- Only approximately 25% of the original plant palette remains.
- No ceonothus remains, while the non-native varieties--morning glory, lantana, honeysuckle and oleander--have flourished.
- Although 47 plant varieties were noted during a site analysis, the same number of varieties originally planted—there are many more varieties of trees, vines and ground cover than in the original plantings. For example, tree varieties have increased from 3 to 17. It is likely many of these trees have self propagated from adjacent properties. As a result of more tree varieties, the current parkway landscape is more “vertical” than envisioned in the original design.

Reaches and Runs

Recognizing the larger landscape character of the parkway corridor and its unique “rooms” or divisions, the parkway Landscape Framework identifies a series of “reaches” and “runs” to facilitate a better understanding of the parkway and corridor landscape. The terms, not coincidentally, are taken from the reaches and runs used in watershed definition (a logical reference for the Arroyo Seco corridor!), and subdivide the parkway landscape into general character regions (reaches) and the smaller rooms (runs).

The reaches and runs identified for the Arroyo Seco Parkway are:



City Hall Reach

- Fort Lee Run
- Chinatown Run
- Cityview/Figueroa Street Run

Elysian Park Reach

- Solano Valley Run
- Portola Run

Cypress Valley Reach

- Confluence Run
- Artesia Park Run
- Lincoln Heights Run

Montecito Heights Reach

- Mt. Olympus Run
- Lummis-Southwest Museum Run
- Sycamore Grove Run

Highland Park Reach

- Debs Park Run
- Hermon Run
- Santa Fe Run

San Pascual Reach

- Garvanza Run
- Pascual Valley Run

South Pasadena Reach

- Grove Run
- Oak Lawn Run
- Raymond Hill Run

Pasadena Reach

- Arroyo Parkway Run
- City Hall Run

RECOMMENDED ACTIONS

ACTION 2.3-1

Develop a Master Landscape Design and Planting Plan for the Arroyo Seco Corridor

Based on the 1940 Arroyo Seco Parkway landscape and planting plans, develop a master landscape design and planting plan for the Arroyo Seco Corridor.

- Develop a corridor wide landscape plan that identifies landscape concepts, designs, and plant materials for public parks and open spaces adjacent to the parkway right-of-way and within the parkway viewshed. The master plan shall articulate recommended plant communities (canopy and understory), relationships (transitions between more formal and more natural plant groupings) and landscape site details including recommended materials and designs for lighting, walls, walks and paths, fences, benches, park structures, parking facilities and playgrounds.
- Provide recommendations and design guidance to assist private property owners and public facilities within the viewshed an opportunity to actively participate in the restoration of the Arroyo Seco landscape. Recommended plant materials, planting styles, pruning practices and screening techniques should be presented.
- Develop site specific landscape recommendations for the parkway landscape (within the right-of-way) for each of the reaches and runs through a thorough analysis and survey for each identified landscape area.
- Develop recommendations for accommodating modern activities and uses within the viewshed (sports fields, park structures, cellular and communications towers and equipment). Modern accommodations should reflect the historic parkway design and natural environment through physical site selection, landscape design and planting patterns, screening and access.

(See also Action 2.1-3: Develop a Historic Parkway Landscape Master Plan and Action 2.4-3: Restoration of Native Plant Communities)

ACTION 2.3-2

Minimize the Visual Impact of Overhead Utilities

Overhead utility lines crossing the parkway and located within the parkway viewshed, in instances negatively impact the views and viewshed in several locations. Overhead utility lines within significant viewsheds or negatively impacting the visual quality of features within the reaches and runs, should be relocated or buried.

- Identify all overhead utility lines that negatively impact significant views from the Arroyo Seco Parkway or from within the Arroyo Seco corridor. Priority should be given to negative visual impacts on natural areas, character-defining land forms and features and significant architectural landmarks. The inventory should identify both the view point (parkway, transit stop, or park) and the object or feature obscured or negatively impacted by the overhead lines (land form, architectural landmark or natural area). Special consideration should be provided

to views from parkway gateway or character-defining views, places of public assembly (parks, transit stops) or historic properties which predate the erection and installation of overhead utility lines.

- Develop a plan to bury or relocate overhead utilities that negatively impact significant views and viewsheds within the Arroyo Seco corridor. The purpose of this plan is not to underground or relocate all utility lines within the corridor or to suggest that utility lines, as a feature, are not part of the history of the corridor, but rather to underground or relocate only those portions of lines located between a significant viewing point and obscuring a significant parkway landmark, landform or feature.

ACTION 2.3-3

Develop a Comprehensive Parkway Fencing Plan

Chain link fencing along the parkway provides a visual barrier to the surrounding landscape, is redundant in many locations and often provides a litter catchment. Every effort, where safety is not an issue, should be made to remove or minimize the chain link fencing along the parkway.

- Inventory all chain link fencing along the Parkway. Identify height, ownership of fence, location (mile-marker, distance from parkway curb), redundancy (parallel fences, fences in front of walls) and safety function (pedestrian or wildlife barrier, or a recreation barrier to prevent balls, Frisbees or other sports objects from entering the parkway).
- Secure a determination from Caltrans legal staff regarding requirements, specifications and locations for chain link fencing. Establish a clear definition for the safety functions/expectations associated with chain link fencing.
- Develop a parkway fencing plan that minimizes the visual impact of chain link fencing through both color and location, eliminates redundant parkway fences and removes unnecessary or ineffective fencing. Whenever possible, existing barriers, such as retaining walls, flood control walls or ornamental fences that serve, in full or part, to meet the objectives of safety fencing shall be utilized as the fencing mechanism. All existing fencing designated to remain or new fencing to be erected should be black vinyl coated attached to black poles with a black stabilization wire/cable through the top course of the chain link.
- Through both physical design and access provision (gates or doors) facilitate litter and rubbish removal for Caltrans, other state or municipal staffs.
- Through location or the provision of approved barriers all required parkway fencing should be protected from errant vehicles.

ACTION 2.3-4

Initiate a Viewshed Protection Plan

While many of the views of the parkway are publicly held or protected (Debs Park, Elysian Park, San Gabriel Mountains), many other “natural” areas, appreciated for their beauty and rhythmic pattern, are potentially developable sites. The preservation of viewshed features that would negatively impact the Arroyo Seco Parkway and corridor, if lost, should be studied and a plan for viewshed protection developed.

- Through the Marketing and Interpretive Planning efforts, identify key viewsheds for interpretation of the National Scenic Byway. These viewsheds then become the foundation for future viewshed protection plans and priorities and are given priority consideration for protection, preservation, or open space acquisition.
- Prepare a map identifying all undeveloped parcels within the Arroyo Seco Parkway viewshed. For all undeveloped lands subject to potential development, identify the maximum development potential based on current zoning and land use policies including potential negative visual impacts such as retaining walls, cellular or transmission towers or facilities, solar fields, reflectivity (such as glass curtain walls), lighting or signage.
- Through visual simulation technology develop illustrations showing the potential visual impact of allowable development on the undeveloped parcels within the parkway viewshed.
- Identify critical undeveloped parcels, that if developed, would negatively impact the historic viewshed of the parkway. Identify undeveloped parcels, that if sensitively developed, would have a minimum negative visual impact on the parkway viewshed. Identify undeveloped parcels, that if developed, would have no negative visual impact on the parkway viewshed.

THE ARROYO SECO, 1898

The Arroyo Seco prior to the construction of the flood control channel



2.4

Actions for Improving the Environment

“Roads and vehicles provide many benefits--allowing economies to function efficiently and providing people and businesses with access to a variety of critical services, goods, and activities--but they also threaten the earth’s biological and physical systems. They facilitate greenhouse gas buildup, acid rain, deforestation, erosion of water quality, and loss of habitats and species. The challenge is to retain the benefits while eliminating or mitigating the threats.

--From Road Ecology.



While the focus of this corridor management plan is on the historic Arroyo Seco Parkway, it sits within the Arroyo Seco Watershed and is a major influence on the functioning of that watershed. Within the immediate parkway environment and within the region there are significant efforts to address the quality and function of the Los Angeles River watershed.

Arroyo Seco Watershed

The Arroyo Seco Watershed is located in northeast Los Angeles, between the San Gabriel Mountains and the Los Angeles River. Lying partially within the watershed are the Angeles National Forest and the cities of Los Angeles, South Pasadena, Pasadena and La Cañada Flintridge, as well as the unincorporated area of Altadena.

A distinctive history and culture links the communities of the Arroyo. The southern tip of the watershed (at the confluence with the Los Angeles River) was a camp location of the first Spanish exploration, and the historic *zanjas*, or irrigation ditches, were located just across from the confluence. As one of the earliest settled parts of the Los Angeles region, the Arroyo Seco contains many cultural and historic attractions, as well as several historic districts. The Arroyo area is known worldwide for its concentration of historic Arts and Crafts resources and many original Craftsman structures. Historic Route 66 runs through the watershed; historically, travelers to Los Angeles entered through the Arroyo’s gateway of sycamores.

The Arroyo Seco Watershed is a sub-watershed of the Los Angeles River watershed, which is a coastal watershed partly within the coastal zone. The Arroyo Seco stream runs in a deeply incised canyon that begins in the San Gabriel Mountains and

drains into the Los Angeles River near downtown Los Angeles. Below Devil's Gate Dam, most of the stream has been channelized. Prior to channelization, stands of alder, willow, and sycamore lined a perennial, trout-filled stream. Most stream and riparian habitats are located above the dam. The removal of riparian vegetation has significantly impacted wildlife and plant diversity. Urban development and exotic plant species have all but replaced the once lush vegetation below the dam. Chaparral covers much of the landmass in the adjacent Angeles National Forest.

Current Conditions and Function in the Arroyo Seco Watershed

The Arroyo Seco watershed is a microcosm of southern California's development by humans and the alteration of natural systems. The watershed exhibits natural and cultural variety that changes dramatically from top to bottom

Geology and Soils

Geologic structure remains the same and processes continue today as in the past. However, with today's developed land use throughout the watershed, geologic processes downstream of the mountains are significantly altered. In the precipitous upper mountain watershed, erosion, or wearing down, of the San Gabriel Mountains continues, as snowmelt and rain attempt to carry the resulting sediments to the Pacific Ocean. Where sediments were once transported from the mountains to the sea while being deposited along the floodplains, they are now caught up behind crib dams throughout the Angeles National Forest. Urban development in the lower watershed has capped soils minimizing natural erosion in some places, and aggravating erosion in other places. Land along the Arroyo has an altered soil structure through the re-engineering of the stream, construction of bridges, roads, dams and the flood control channel, and many other land uses, involving earth moving. Soils are either graded for cut and fill, excavated or imported, often as poor quality "engineered" soil. Outside of naturally occurring erosion in the mountains, soil erosion potential is high where man-made disturbances occur, such as highway construction.

Hydrology

The historic hydrologic cycle has been significantly altered in four primary ways: surface and groundwater alterations for conservation, supply and flood control; surface and groundwater contamination; variation in groundwater levels from impermeable surfaces, pumping and diversions; imported water entering the system due to demands exceeding local supplies.

Geomorphology and Sedimentation

Watershed processes continue, despite alterations to the landscape and hydrology over time. Nature has adapted to human disturbances, with varying degrees of functionality. One of the most dramatic alterations involves the shift from a permeable landscape to a virtually impermeable one. Paving over the land and the construction of thousands of structures within the watershed, have dramatically reduced the system's ability to naturally recharge the groundwater. The Arroyo Seco Parkway was literally built in the floodplain of the Arroyo Seco. The elimination of foothill and riparian vegetation has had a detrimental effect on our wildlife populations. Dams play an important role in

managing floodwaters in the watershed. They also play a role in groundwater recharge, water quality, and sediment transport. Although relatively undeveloped, the upper watershed still feels the effects of human disturbance. Because of the check dams in the Angeles National Forest that remove sediments from flows. When flood waters free of sediments actively scour and erode streambanks, this weakens riparian habitat through erosion, degrading its viability to support native plants. As a result of these dynamics and other human disturbances, silts and sand no longer replenish the beaches of southern California.

Water Supply, Surface and Groundwater

Surface and groundwater water structure can be grouped into five general categories, each transporting water differently. These include natural streams, the built storm drain system, dams and diversions, impermeable or built surfaces and permeable open space. The most dramatic structure alteration within the watershed is of course the containment of the Arroyo Seco stream and tributaries into concrete flood control channels and underground storm drains. This engineered system quickly conveys storm water flows off of impermeable urban lands straight to the Arroyo Seco where it is rushed to the ocean via the Los Angeles River. Devil's Gate Dam and other smaller dams throughout the Angeles National Forest conserve water, detain sediments, and recharge the Raymond Basin aquifer. Finally, permeable surfaces of vegetated open space slow down runoff, and aid in groundwater percolation.

The Los Angeles County Department of Public Works (DPW) has jurisdiction over the actual Arroyo Seco channel. DPW, along with the cities of La Cañada Flintridge, Pasadena, South Pasadena and Los Angeles, maintain storm drains throughout the watershed. The US Forest Service manages Brown Mountain Dam, crib structures and streams in the Angeles National Forest (Angeles NF). Crib structures in the Angeles NF, which were constructed to slow floodwaters and collect sediments, are now altering stream functioning as sediments continue to deposit and accumulate upstream. Most water resource infrastructure is located in Pasadena, although groundwater pumping occurs in Los Angeles.

The Arroyo Seco Watershed is a major source of water for Pasadena, La Cañada Flintridge, Altadena and other surrounding communities. Surface flow coming from the mountains is diverted into spreading basins in the Hahamongna area, which replenish the Raymond Basin. This diversion dramatically reduces the natural flow available for aquatic habitat.

About 150 yards south of Devil's Gate Dam, the Arroyo Seco flood control channel begins. Stream flow from this point all the way to Long Beach travels in a concrete lined channel, with the single exception of the unlined stretch that extends from the Holly Street Bridge to the Colorado Street Bridge. Below the Raymond Fault, a narrow stream lined by steep hills characterizes the Arroyo Seco corridor. In addition to the concrete-lined stream, there is some subsurface flow but no connection to a definable water basin, as the stream flows to the Los Angeles River at the base of the Elysian Hills near Dodger Stadium.

Water Quality

The water quality of the Arroyo Seco Watershed is directly impacted from the surrounding land use. With nearly half of the watershed (22.3 sq mi. - 48%) in the Angeles National Forest, the upper watershed tends to be relatively free of human-generated pollutants, but with steep slopes and natural cycles of fire, drought, and flooding, the upper watershed can generate fine suspended solids to major debris flows. Wildfires may also affect water quality, due to the loss of vegetative cover, increase in erosion and ash deposits.

Moving south in the watershed, horse corrals and golf courses may contribute nutrients (nitrogen, phosphate, ammonia) from manure and fertilizers. Urbanization has resulted in an accumulation of polluted runoff from roads, commercial areas, industry, and residential neighborhoods. The Arroyo Seco Parkway, with its extreme proximity to the stream, clearly impairs the water quality and can load the system with trash and a mixture of petrochemicals. Both surface and groundwater have serious water quality impairments. Water from the Arroyo is non-potable and it is not safe to come into bodily contact with the water in its current state. Trash, coliform, and algae have been found to be the Arroyo Seco's three main pollutants, according to the state's 303(d) list of impaired water bodies.

Water quality is degraded in the Arroyo Seco watershed, as in all of southern California. Human settlement and disturbances to natural processes are the main reasons for poor water quality. In addition, valuable stream and riparian habitat was destroyed. The lack of sand, gravel and boulders eliminated the habitat for macroinvertebrates (critters at the bottom of the aquatic food chain which fish and other aquatic animals eat), and fish. The elimination of riparian vegetation at the edges of the stream meant hotter temperatures of water due to lack of shade. Riparian vegetation can help reduce runoff velocity and filter pollutants flowing towards a stream. Reduced groundwater recharge due to impermeable surfaces and stream channelization over alluvial soils has compounded the issue of groundwater overdraft due to surface flow diversion and groundwater pumping. Currently there are at least fifteen users of pumped groundwater from the Raymond Basin, including several in the City of Pasadena, and other cities throughout the San Gabriel Valley. The aquifer provides 40% of local water supplies, with the remainder coming from imported water sources provided by Metropolitan Water District. The City of Pasadena is interested in developing additional groundwater recharge potential for the Raymond Basin aquifer.

Restoring the Arroyo Seco stream and tributaries is probably the most challenging, but most rewarding of the watershed restoration tasks. Stream restoration is the key recommendation of the Arroyo Seco Watershed Feasibility Study. The Raymond Basin would benefit from more natural recharge. Removing the concrete channel is a complex issue, and requires that a number of studies and watershed wide projects take place first. As stated by consulting geomorphologist Martin Kammerer, "...complete restoration is not feasible because substantial portions of the floodplain are urbanized.

Final design requires a juggling act between restoration goals and physical constraints,” (Appendix I: *Geomorphologic Opinion on Feasibility of Stream Naturalization-The Lower Arroyo Seco*). However, it is also noted that implementing Best Management Practices (BMPs) within urbanized areas of the watershed will definitely contribute towards restoration. Ultimately, the entire fabric of our hydrologic system, flood channels, storm drains, dams and diversions, and even the asphalt, concrete and structural caps over permeable soils, must be evaluated for maximum benefit.

Improvements to surface water can be made in a relatively short amount of time by retrofitting properties to clean up storm water runoff. Areas of heavy automobile traffic such as the parkway are good candidates. Measures to collect trash from runoff will greatly reduce the pollutant-load on the streams. Current infrastructure rushes storm water directly off of roads and buildings, allowing for little or no filtration of pollutants to take place. Implementing Best Management Practices (BMPs) are critical to the improvement of surface water quality in a relatively short time period.

Habitat

According to project conservation biologist Verna Jigour, “...while the Arroyo Seco watershed retains a relatively high degree of native biological diversity, it may be thought of as teetering on the brink of ecological destruction, evidenced by a high rate of extirpations of historically present wildlife species and significant degradation of many remaining habitats.” This is evidenced by the fragmented open spaces of habitat. The uppermost watershed has vast open space due to the Angeles national Forest. In the middle, the San Rafael and Verdugo Hills still contain open space habitat, although their connections to the San Gabriels are tentative at best. Lower in the watershed, Mt. Washington, Montecito and Monterey Hills mapping indicate that habitat patches exist, but are so fragmented that their viability of habitat for healthy populations of wildlife is severely limited. The Arroyo Seco is a tentative corridor for wildlife passage, possibly connecting the San Gabriel Mountains to the Elysian Hills to the southwest. Of foothill habitat, only fragments in the watershed are left today.

The Angeles National Forest has the best contiguous mountainous habitat. Before settlement of the foothills, there were lateral habitat connections via tributaries, valleys and ridgelines. These historic passageways have been severed by the development of Los Angeles and vicinity.

As the region’s population grew, demands on natural resources and open space increased. More and more open space was developed for residential neighborhoods, severing habitat corridors that allowed wildlife movement through the foothills. Channelizing the Arroyo Seco meant that it could no longer function as riparian and aquatic habitat. Before dense settlement occurred, the Arroyo Seco and its floodplain most likely served as an aquatic and terrestrial habitat corridor to/from the San Gabriel Mountains to the Santa Monica Mountains and to the Pacific Ocean.

In terms of habitat, the most important step towards a restored watershed is the need to restore and protect missing linkages of fragmented habitat. Without these wildlife

movement linkages established, the trend will continue towards extinction of native plant and animal species from this region. At the same time, restoration and protection of existing open space and riparian habitat needs to occur, with new habitat being created where appropriate.

Open Space and Recreation

Open space has many benefits to the public, including increased air quality, a visually pleasing landscape, opportunities for active and passive recreation, and relief from the urban spaces of Los Angeles. A complete network of trails is also beneficial, as it provides a range of recreational uses, access to everyone, alternative methods of transportation, and connections between public open spaces and other trails. It is not difficult to find public open space within the Arroyo Seco watershed, including the Angeles National Forest, numerous city parks, Descanso Gardens, and undeveloped hillsides. However, because most of the public open space is clustered around the Arroyo Seco, many residential neighborhoods are without small neighborhood parks.

A high demand exists for recreational use of the natural areas and trails of the Arroyo Seco watershed. However, recreational activities in the Arroyo must compete for open space, because the amount of natural, open, public land is insufficient. Additional public open space is needed to meet the demands of the public. Of high priority is the need to protect current open spaces. The need exists to maintain existing open space for habitat, recreation and vision quality values. In addition, creating new open space through future land use conversion needs to be examined. Recreational users in the watershed have a strong interest in the management and future of the area's natural resources.

Arroyo Seco Watershed Restoration Feasibility Study

Figure I-1: Location Map

Prepared by: Mountains Recreation and Conservation Authority (MRCA).

Source: Los Angeles County Department of Public Works

Arroyo Seco Watershed Restoration Feasibility Study

Figure I-3: Topographic Relief

Prepared by: Mountains Recreation and Conservation Authority (MRCA).

Source: US Geological Survey, Digital Elevation Model (DEM)

Arroyo Seco Watershed Restoration Feasibility Study

Figure III-1: Land Use

Prepared by: Mountains Recreation and Conservation Authority

Source: Los Angeles County Department of Public Works III-6

RECOMMENDED ACTIONS

ACTION 2.4-1

Improve the Quality of Parkway Storm-water Runoff

The parkway negatively impacts the Arroyo Seco through stormwater runoff and trash that blows from the parkway into the channel. The roadbed and road surface wear in addition to motor vehicles contribute 23 pollutant constituents according to the Federal Highway Works Administration. These include heavy metals, PCBs, chloride, and petroleum, to name a few. While the parkway is not a truck route, spills and leaks from traffic accidents can also negatively impact water quality. The parkway is perhaps the greatest obstacle to restoration of ecological function of the Arroyo Seco due its close proximity to the channel.

- The California Stormwater Quality Association (CASQA) has developed Best Management Practices (BMPs) for stormwater management. In the volume for municipalities, the most effective BMP applicable here is to have a regular and frequent program of street sweeping. Caltrans does sweep the Arroyo Seco Parkway, but trash often collects along the chain link fence next to the road. Because clearances are so tight, it can be nearly impossible for road crews to clean the right of way and shoulders of the parkway. More frequent sweeping and an enhanced schedule for litter collected in the parkway fencing and vegetation should be studied (seasonal variations, specific sites) and implemented.
- Study, locate and install stormwater interceptors for trash and pollutants from the parkway into the storm drains that feed the Arroyo Seco to provide an even higher level of protection and opportunities for restoration of ecological function for the Arroyo Seco.

ACTION 2.4-2

Alternative Noise Attenuation

Traditional soundwalls will not be a compatible or acceptable approach to sound attenuation in this historic parkway corridor. Concrete sound walls are frequently used for the most efficient noise reduction, but can be visually obtrusive, reflect heat and glare, provide a surface for graffiti and are inappropriate in a historic district or within a cultural landscape setting due to their scale and material composition. While many people believe that plants attenuate noise, in fact, plants by themselves offer little noise reduction. In areas where space permits or land can be acquired, the berming of soil and subsequent planting should be used as a strategy to reduce noise AND add to the beauty of a natural environment such as the Arroyo Seco.

- Investigate and identify areas of the parkway where noise attenuation is needed.
- Where space permits, or can be acquired, install berms to meet noise attenuation needs. Berms to be constructed of mounded soil that is compacted and planted. Care shall be taken to provide a top layer of non compacted quality soil suitable for plant growth and development and the selection of plant materials and

- planting design shall both maximize noise attenuation goals and reflect and be compatible with the original parkway planting aesthetic.
- Where required, chain link fencing shall be located on berms and screened with plant materials. Chain link fencing, once plant materials mature, should not be visible from either the parkway or the neighborhoods or public spaces adjacent to the parkway. Chain link fencing shall be vinyl coated in a black, dark green or brown finish to further minimize any negative visual impact. Where sound walls are unavoidable, a maximum practicable setback should be achieved with vines planted on the walls and additional plants in front to maintain the scenic character of the parkway and minimize the negative visual impact of the walls. Walls shall further be constructed of a material that “blends” with the general colors of the landscape and be articulated wherever space permits to minimize the appearance of a channel.
 - Remove and replace the traditional soundwall constructed on the southbound side from Via Marisol to Avenue 52 with a more appropriate sound attenuation device; or at a minimum, plant it with vines.

ACTION 2.4-3

Restoration of Native Plant Communities

The original Arroyo landscape, prior to the construction of the parkway and flood control channel, would have been a riparian plant community—the remnants of which are still visible not only in the channel but in the parks the border the parkway and Arroyo Seco. Large sycamores help define the character of the parkway itself.

Nonetheless, one must look to the underlying ecology of the present condition of the parkway when designing a planting palette for the vegetated areas of the parkway. Not only has the soil structure changed from the building of the parkway, but in the intervening years particulate deposition from vehicular traffic has probably changed the chemical composition as well. Maintenance practices for controlling plant growth, whether mowing, disking, or the use of herbicides impacts the ecology of the roadside as well.

Where the original soil may have been a loose alluvium renewed with subsequent sand and silt deposition from the arroyo, and a rich riparian habitat provided shade, the condition now is that of compacted soil, hot, dry conditions, and weedy undergrowth. The original parkway planting included native plants, few of which have survived today. It is no longer known what plants exactly were used, and where. Thus, the selected plant palette must be responsive to existing conditions, recognizing that underlying structure is so altered that a true restoration back to original conditions is no longer possible. If native plants are to be used, correlating current conditions of the parkway with analogous natural conditions elsewhere may be a more appropriate strategy for development of a planting plan. In some severe circumstances, such as narrow medians in the center of the parkway with little opportunity for maintenance or replacement of plants, non-native Mediterranean climate plants may be the best choice for planting.

- Identify all pre-construction native plant materials within the parkway right-of-way, the flood control channel and parks and assess their current health, life expectancy and form and shape (natural, mutilated, improperly pruned or trimmed, overgrown or blocking intended views). Remove all damaged, diseased or overgrown (if negatively impacting the parkway landscape) plant materials.
- Identify native plants from the region, that while not present in the historic riparian landscape of the Arroyo, would be well suited to the contemporary cultural conditions (soil, water, sunlight) of the Arroyo. Additionally, native plant materials that meet modern conditions for drought tolerance and highway conditions (exhaust, runoff, wind) should be identified.
- Identify modern plant hybrids that meet many of the physical (form, color, texture) and environmental (soil stabilization, water retention, habitat) of native plants from the original riparian landscape.

(See also Action: Restore Historic Landscape Design)

ACTION 2.4-4

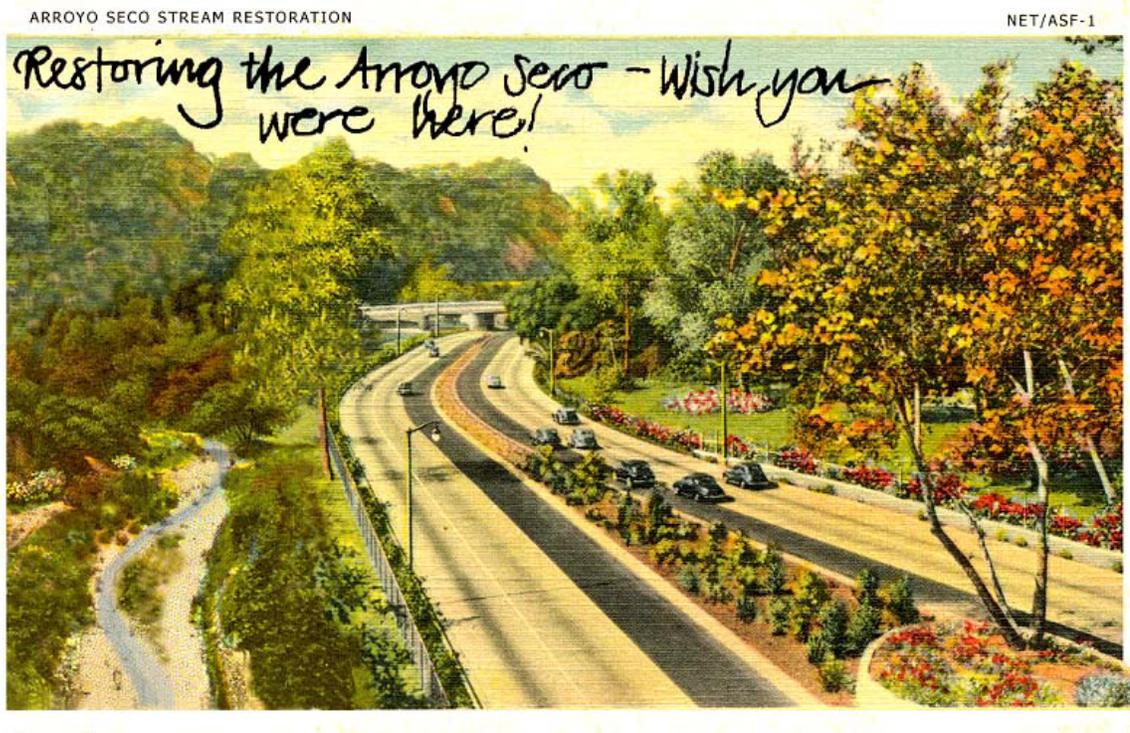
Mitigate Single Source Light Pollution within the Arroyo Seco Parkway Viewshed.

The Arroyo Seco Parkway traverses one of the largest concentrations of urban parklands and natural spaces in the greater Los Angeles area. While the natural vegetation and landforms make such a concentration obvious to the parkway traveler during daylight hours, nighttime lighting in the corridor can diminish such an association as hillsides are punctuated with points of illumination—introducing a distinctly human element into the natural landscape. While many of these lights perform needed functions, a more thoughtful consideration of their direction, halos and intensity on the parkway, may enhance the nighttime experience of the Arroyo Seco without compromising their utility.

- Identify streetlights, flood lights and other sources of illumination from public facilities and commercial properties within the Arroyo Seco Parkway viewshed that are visible at night.
- Where possible, redirect, shield or reduce the wattage of security lighting from public facilities and commercial properties within the parkway viewshed to enhance the natural character of the Arroyo Seco at night.

WELCOMING THE VISITOR

A vision of a restored and rehabilitated historic parkway and corridor.

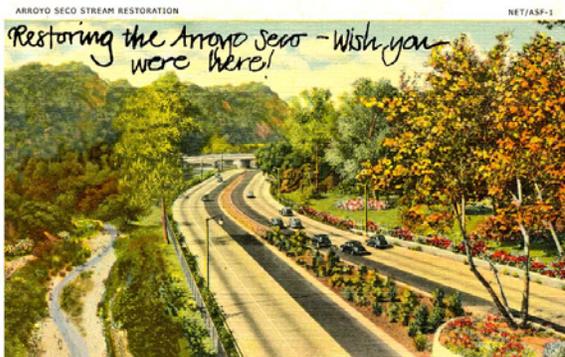


2.5

Actions for Welcoming the Visitor

“The point is that a place must develop a set of objectives and strategies toward visitors rather than promoting haphazardly. Once a place decides on visitors and how many visitors it wants, it can begin to build up its facilities and infrastructure. It does this by researching what its target visitors seek in different destinations and what they seek in coming to one place. Many a community has built up its visitor infrastructure without clear target groups in mind, only to be left with half-empty hotels and facilities.

--Philip Kotler, Donald H. Haider and Irving Rein, Marketing Places



The Arroyo Seco Parkway and Arroyo Seco corridor represent one of the richest concentrations of heritage and cultural resources in Southern California. From the landmark Southwest Museum towering over the parkway to the Gamble House in Pasadena the corridor presents the visitor with an infinite array of stories, resources public access and activities at a number of key visitor destinations. In

addition to traditional visitor attractions such as the Charles Lummis House, Heritage Square and the Los Angeles River Center and Gardens, the parkway’s historic bridges, engineering design and associated parks, and the design of the flood control channel represent untapped stories rich in interest. Even the history of the communities of the Arroyo—their evolution and the initial impacts of the parkway’s construction present opportunities to educate and inform resident and heritage visitor alike.

Due to the corridors intensive use and urbanization, however, many visitors and residents are not aware of the corridor’s visitor resources and visitor potential. This plan identifies the stories and themes by which the history, environment and culture of the corridor may be better showcased and offer recommendations for techniques, programs and sites by which the interpretive plan may be implemented.

The National Trust for Historic Preservation defines as cultural heritage tourism as *traveling to experience the places, artifacts and activities that authentically represent the stories and people of the past and present. It includes cultural, historic and natural*

resources. As a newly designated National Scenic Byway, the Arroyo Seco Parkway has an unprecedented opportunity to share the heritage of this nationally significant corridor through museums, sites and interpretive facilities.

Cultural Heritage Tourism in the United States

Tourism is big business. In 2001, travel and tourism contributed \$537.2 billion to the U.S. economy, making travel and tourism the third largest retail industry in the U.S. behind automotive dealers and food stores. Travel and tourism directly employs more than 7.9 million people and indirectly supports another 10.1 million jobs, creating a total of 18 million jobs – that’s 1 of every 7 people in the U.S. (*Source: 2002 Tourism Works for America Report*).

In addition to creating new jobs, new business and higher property values, well-managed tourism improves the quality of life and builds community pride. According to a 2001 *Report on Cultural and Historic Tourism*, visitors to historic sites and cultural attractions stay longer and spend more money than other kinds of tourists. Cultural and heritage visitors spend, on average, \$631 per trip compared to \$457 for all U.S. travelers, and they spend an average of 4.7 nights away from home as compared to 3.4 nights for all other travelers. (*Source: Travel Industry Association of America*). Perhaps the biggest benefits of cultural heritage tourism, though, are diversification of local economies and preservation of a community’s unique character.

Travel Trends Create Opportunities and Challenges

Americans are busier than ever, and this is reflected in current travel trends. Weekend travel has been on the rise as time-squeezed Americans fit in several long getaway weekends to replace longer vacations to destinations further from home. In an urban area such as Los Angeles, this creates opportunities to design experiences to “explore your own backyard” to discover new places that are not far away. Hectic lives have also made travel packages and itineraries popular, providing turn-key travel products that eliminate the need for extensive planning prior to a trip. The internet is also increasingly becoming a source for travel information that is heavily relied upon.

Aging baby boomers are a growing market for cultural heritage tourism. The Travel Industry Association’s travel trends indicate that baby boomers took more trips in 1999 than any other age group, and the profile of boomers fits with that of the cultural heritage traveler. Cultural heritage travelers tend to be slightly older than other travelers, and aging boomers, like cultural heritage travelers, spend more on their trips than other age groups. A 1998 Market Assessment Plan on baby boomers prepared by the National Tour Association noted that “*because boomers are more experienced travelers, they will expect more from their experiences and terms such as cultural tourism, heritage tourism, sports tourism, active tourism, adventure travel and ecotourism will be commonly used within the next decade.*”

The growing boomer market certainly provides tremendous growth potential for cultural heritage tourism, but it also raises the bar in terms of visitor expectations. The sophistication of this emerging market will demand an experience that is authentic, high quality, and in many cases, customized to meet individual interests and needs. The most successful cultural heritage tourism destinations are providing a variety of changing visitor experiences that will draw repeat visitors as well as appealing to a range of first time guests.

Additionally, there is a broadening perspective of history that is increasing visitor interest in sites that represent everyday life rather than simply the lives of the rich and famous. As corporate expansion and other growth is creating new neighborhoods and businesses that are increasingly homogeneous, older neighborhoods that have held on to their unique attributes and heritage are becoming increasingly appealing for visitors as well as for potential residents.

In the aftermath of 9/11 and the ensuing economic recession, travelers have turned the focus of their travel plans closer to home. According to the Travel Industry Association of America, “with the war over and consumer confidence rising, Americans are getting back to travel with 82 percent planning to take at least one trip this summer, according to the Travel Industry Association of America (TIA). A record number of Americans will be staying within the U.S. and driving to their destinations. Research indicates that travelers are looking for flexible, affordable, hassle-free vacations to create their own unique memorable experiences.”

Challenges

While research clearly indicates that there is a strong and growing market for cultural and heritage tourism experiences, reports on attendance at individual historic sites and museums are mixed, with many sites showing a flat or even decreasing attendance. While no research has yet been completed to address this issue in a comprehensive way, cultural and heritage site managers across the country have offered their own theories about why this is happening.

1) Increasing Competition

While the number of heritage visitors seems to be growing, the number of cultural and heritage attractions is also increasing. Thus rather than boosting attendance at one site, the additional cultural heritage travelers are spread out between more attractions. Additionally, attractions that previously would not have been considered heritage attractions are looking for ways to incorporate “edutainment” or learning opportunities into the visitor experience.

2) Customer Service

While cultural heritage sites have traditionally excelled in the areas of conservation and preservation, customer service and marketing are newer concepts for many. The sophisticated cultural heritage traveler will demand an experience that is not only authentic, but also one that provides a high level of customer service.

3) Changing Travel Market

Cultural heritage sites have been slower to adapt to changes within the US travel market. With the shift away from longer family vacations to multiple, shorter trips throughout the year, cultural heritage attractions need to find ways to attract local visitors as repeat guests as well as appealing to travelers from further away. The sites that have been the most successful have diversified their offerings to include changing attractions along with special events and new experiences.

4) Supporting Destination Attractions

Corridors rich in history, such as the Arroyo Seco, are usually comprised of a variety of visitor attractions with varying levels of visitation. Often the area's mix of small attractions and sites, which may not be viewed as "destination attractions," benefit from "spillover" visitation (and thus financial support) by physical proximity to attractions that may offer more of a regional draw or be better recognized. While many tourism initiatives are geared toward supporting smaller and emerging attractions and sites, it must be remembered that destination attractions continue to be the primary source of most visitation to a region—their long-term viability and sustainability thus having a direct impact on smaller facilities. The Arroyo Seco region is well positioned with a solid mix of both destination attractions and smaller attractions that have a solid authentic sense of place.

To respond effectively to these challenges, heritage and cultural attractions nationally must be educated about the changes in the current travel market and how to respond effectively. Additionally, many sites could benefit greatly from customer service training to respond to the needs of visitors effectively. Additional research will be required to ascertain how the attractions along the Arroyo Seco scenic byway fit in to the national outlook for cultural and heritage attractions.

Heritage Tourism and the Arroyo

The Arroyo Seco Parkway offers a distinctly urban experience quite unlike most other National Scenic Byways. The Arroyo Seco Parkway was "the first divided-lane, high speed, limited access road in the urban western United States and the prototype of the world renowned Los Angeles Freeway system." The Arroyo Seco Parkway, was the precursor to the modern Interstate.

The Arroyo Seco is anchored on each end by an established destination; Pasadena on one end and downtown Los Angeles on the other. The museums and attractions in Pasadena are visitor ready and already have a strong draw for visitors. Downtown Los Angeles is also a business and pleasure destination, with attractions such as the Museum of Contemporary Art (MoCA), the Dorothy Chandler Pavilion, the much anticipated Walt Disney Concert Hall. While downtown L.A. has had ups and downs over the years, this area is currently experiencing a renaissance. In addition to the construction of new landmarks by famous architects, there has been a movement to create living spaces downtown, many in lofts in historic structures. According to a November 11, 2002

article in *Newsweek* magazine, 300,000 people work in downtown L.A. and there are 5,000 living units currently in downtown with another 5,000 planned to be completed in the next three years.

Many of the communities between downtown Los Angeles and Pasadena are “diamonds in the rough” with a rich heritage and a varied mix of attractions with a tremendous amount of potential. Chinatown is located adjacent to the downtown area, offering a variety of restaurants and shops. The Highland Park neighborhood includes a number of arts and crafts style homes as well as prominent historic sites such as the Charles Lummis House, the Southwest Museum (an anchor destination) and Heritage Square. Highland Park has a historic business district on Figueroa Street poised for rehabilitation. South Pasadena has a historic business district with visitor amenities such as bed and breakfasts.

As Pasadena already has such a strong and established image, one of the greatest challenges of the Arroyo Seco is to present an image of the entire byway corridor as a collective experience. By investing in the attractions and the communities in the few miles in-between the two established anchors, the byway experience can be greatly enhanced as a unified corridor.

Opportunities and Partnerships

Partnerships with the Gold Line

A new light rail line opened in July 2003 along the Arroyo Seco corridor, crisscrossing the parkway at key locations. This provides a great tourism and interpretation opportunity for several reasons. First, the Gold Line is one way to help alleviate the overcapacity currently occurring on the Parkway.

Discussions are already underway to put a “cultural corridor” concept in place on the Gold Line, which provides tremendous opportunities to create linkages with Highland Park and other neighborhoods between downtown and Pasadena. Virtually every stop along the Gold Line is adjacent to significant cultural attractions.

The Gold line also offers opportunities to explore multi-modal transportation, and the stops along the Gold Line offer incentives for travelers to slow down and explore new areas. Finally, the views of the Parkway from the Gold Line passenger trains provide several key places for interpretation of the National Scenic Byway, including the train crossing the Arroyo via the historic Santa Fe Railroad Bridge.

Partnerships with the Museums of the Arroyo

This loose coalition has a fifteen-year history, and has sponsored an annual “Museums of the Arroyo Day.” In addition, they have discussed other opportunities such as a passport program and interchangeable memberships, and have expressed an interest in reviving or expanding this discussion.

Developing and Promoting Group Tours

Identify organizations and companies that have an interest in offering group tours in the Arroyo Seco area, with an emphasis on the sections that have been less developed for tourism. This would include, but not be limited to, the walking tours that the L.A. Conservancy will be offering in Highland Park and tour operators such as Daytrippers (out of San Diego) and Connect L.A. Look at opportunities to encourage other tour operators and organizations to offer group tours in the area, and seek out ways to encourage existing group tour providers to extend their stay and visit additional sites in the area.

Expanding School Programs

Explore the opportunity to integrate children's education into interpretive efforts for the Arroyo Seco byway. While initial research indicates that it would be extremely challenging to integrate this into the public school system in Los Angeles, there may be ways to work with after school programs, YMCAs, girl/boy scouts, teen programs or other groups to reach out to new audiences.

Branding of the Arroyo Seco National Scenic Byway

The Arroyo Seco takes travelers through an incredibly diverse environment in a few short miles—from the central downtown of one of the largest cities in America through Chinatown and other culturally diverse neighborhoods, ending in Pasadena which is a well known destination for the arts and crafts heritage, shopping, and the Rose Bowl.

The challenge is to create a collective identity for this diverse byway that encourages visitors to see the connections between these seemingly disparate neighborhoods. For example, the City of Pasadena is marketed with an arts and crafts motif, but using this motif for the entire byway might not necessarily reflect the attractions in downtown L.A. or Route 66 or capture the essence of the 1940 roadway.

Components of a branding campaign would include distilling the “essence” of the Arroyo Seco into a tag line and logo, developing guidelines for the use of the tag line and logo, and launching a media branding campaign to develop awareness of the Arroyo Seco “brand.”

RECOMMENDED ACTIONS

ACTION 2.5-1

Conduct Audience and Market Research

Prepare a comprehensive audience and market research study for the Arroyo Seco Parkway and corridor to determine the recognition of the corridor and its desirability as a visitor destination.

- Identify current and potential audiences for key interpretive sites along the Arroyo Seco, and provide recommendations to expand audiences and increase length of visit, using existing research to provide baseline data and commissioning additional research as needed.

- Identify existing marketing strategies and partners that currently promote the Arroyo Seco.
- Assess the diversity, marketability, quality, interpretative programs and desirability as a visitor destination for key historic, cultural, recreational and natural sites in the corridor.

ACTION 2.5-2

Identify and Assess Potential Key Interpretive Sites

Identify key interpretive sites along the Arroyo Seco, including, but not limited to the Southwest Museum, Lummis House, Gamble House, Heritage Square and the communities of the Historic Route 66 Corridor. Complete an in-depth assessment of selected cultural and heritage sites along the Arroyo Seco—providing site specific recommendations for interpretation and marketing as well as overall interpretive recommendations to benefit the entire byway.

- Evaluate ease of access from the parkway corridor to the interpretive facility (and ease and access of return).
- Make recommendations for interpretive sites to accommodate visitors and residents for whom English is not a first language and disabled visitors (physical access, Braille, large-print and audio).
- Identify sites that, due to physical location (en route to a school or commercial district or adjacent to a Gold Line station) will engage the resident population in a better understanding of the history and significance of the Arroyo Seco corridor.

ACTION 2.5-3

Develop an Interpretive and Marketing Plan

Recognizing that marketing and interpretation are most effective through a coordinated planning process, an Interpretive and Marketing Plan for the Arroyo Seco Parkway shall be developed making recommendations for tourism and economic development opportunities within the corridor.

- Explore the specific areas of opportunity identified during the initial assessment visit to welcome and provide visitor services/direction and amenities for targeted visitors, including:
 - 1) Partnering with museums and attractions of the Arroyo
 - 2) Partnering with the new Gold Line
 - 3) Cultivation of Group Tour opportunities
 - 4) Development and Expansion of Children’s Programs
 - 5) Branding of the Arroyo Seco
 - 6) Partnering with national and local Historic US Route 66 organizations and experts.
 - 7) Accommodation for multiple languages (both targeted visitors and local residents) and ADA (accessible interpretive panels, Braille, large-print and audio)
- Identify a strategy to build capacity for tourism readiness at visitor resources (sites, museums, parks, trails, visitor service providers) throughout the corridor. Visitor capacity may be needed through restored facilities, new construction,

support services (transportation, interpretation, education, hospitality training), and an organization mechanism to promote and sustain tourism within the corridor.

ACTION 2.5-4

Developing an Arroyo Seco Corridor Visitor and Interpretive Center

Develop a high quality visitor and interpretive center to serve the Arroyo Seco corridor. In addition to general information, maps and comfort facilities, the visitor center should include interpretive exhibits showcasing the history of the corridor, the natural, built and cultural environment, the construction of the parkway, arts and culture.

- The interpretive center should share the history and culture of the corridor through photography, exhibits, film, and interactive media. Additionally the facility should provide office and support services for the scenic byway and affiliated/partnering organizations within the corridor, provide community facilities for school children and continuing education focused on the traditions, natural systems, history and culture of the Arroyo.
- The design of the facility should showcase the design traditions and history of the Arroyo corridor. The exterior spaces (gardens, walks, public areas and parking) should reflect the landscape design heritage of the corridor and the natural environment.
- The facility should be located with convenient access to a Gold Line station and local bus routes.
- The visitor center should be centrally located and convenient to the Arroyo Seco Parkway. Access to and from the parkway should be clearly provided with all turning movements identified in advance.

ACTION 2.5-5

Develop Parkway Recognition Program for Resource and Media Organizations

Coordinate outreach to all local, state and national map companies, news agencies, rental car agencies, online map resources and federal and institutional mapping organizations for consistent reference to the byway as “California Route 110/Arroyo Seco Parkway.”

- Contact principal map designers and distributors in southern California such as Thomas Brothers, American Automobile Association (AAA), California Automobile Association (CAA), Rand McNally, United States Geological Survey (USGS) and Mapquest.
- Coordinate with all regional news organizations that report traffic in the greater Los Angeles to refer to the “Arroyo Seco Parkway”.

2.6 Actions for Engaging the Public

“Residents of a metropolitan area will not accept a ...strategy handed to them without significant prior consultation. So there must be some means of enlisting both initial and later inputs from many different groups. These should include subgroups defined in terms of geography, socioeconomic status, occupation, ethnicity, and political perspective.

--Anthony Downs, New Visions for Metropolitan America



The success of any corridor management plan is incumbent on both a community outreach process and awareness campaign. Local government, community leaders and interested residents must be invested in the activities proposed in any successful plan. In fact, plans are only successful if developed through such input. A corridor management plan must also recognize that no matter how active and invested governments and communities are in the process, there are still many people who will not actively participate—particularly in a corridor utilized by commuters. It is, therefore, essential that a broader outreach campaign through printed and electronic materials, and information signs and

events during construction processes clearly present the casual parkway user or corridor resident with basic information.

Public Outreach

The public outreach program for the Arroyo Seco Parkway Corridor Management Plan has been developed locally and designed to ensure that the varied communities, neighborhoods, and other corridor users are represented. From school children who cross over the parkway and the commuters that pass beneath, to the historic preservationists, environmentalists, recreation users and corridor advocates, the public outreach process will strive to accommodate their goals and aspirations—as well as the wealth of information only a daily user or resident can share.

RECOMMENDED ACTIONS

ACTION 2.6-1

Establish An Arroyo Seco Parkway Group/Organization

Establish an Arroyo Seco Parkway group or organization to promote the National Scenic Byway designation, champion the restoration and rehabilitation of the parkway and serve as a representative body of parkway corridor stakeholder groups.

ACTION 2.6-2

Host Public Information Forums

Representatives of the Arroyo Seco Parkway advocacy group or organization should actively participate in Arroyo Seco Corridor related activities such as Council of Arroyo Seco Agencies (CASA), Council of Arroyo Seco Organizations (CASO), local community based groups, and governmental and educational organizations within the Arroyo corridor.

ACTION 2.6-3

ArroyoFest



Coordinate with the ArroyoFest nonprofit and/or steering committee to institute ArroyoFest as an annual or bi-annual parkway and corridor event. Due to the overwhelming success and public good will generated during the June 2003 event, develop a formal planning process for ArroyoFest to celebrate the resources of the Arroyo Seco.

Establish an Arroyo Seco Parkway booth at ArroyoFest to continue public outreach and community participation outreach processes for the Arroyo Seco Parkway Corridor Management Plan.

Representatives of the National Scenic Byway and corridor management planning team representatives should be present to introduce the concepts behind the planning process, share existing efforts (Historic American Engineering Record documentation, for example), invite public comment on the planning and implementation processes and establish and update a mailing list for interested parties/stakeholders.

ACTION 2.6-4

Community Meetings

Project team to host community/stakeholder meeting to introduce and seek input on the draft Corridor Management Plan. The meeting will be centrally located and promoted in such a manner as to provide multiple presentation times for maximum public participation. In addition to the draft and final CMPs, additional public materials for related and concurrent activities within the corridor should be made available.

ACTION 2.6-5

Commuter Survey

Develop a user survey to determine the concerns and interests of parkway commuters and users. The survey will also be designed to determine the awareness of and interest in the historic preservation activities associated with the rehabilitation of the Arroyo Seco Parkway.

- Determine local resident vs. through traveler.
- Determine safety perceptions regarding the parkway and what, if any, responses drivers make as a result.
- Assess the willingness (and reality) of drivers to adjust their behavior for reduced speeds, construction activity or special events (such as ArroyoFest).

ACTION 2.6-6

Design and Distribute an Arroyo Seco Parkway Brochure/Mailer

Recognizing that many residents do not engage in advance planning processes, the ASP byway organization will design and distribute a multi-lingual information piece summarizing the byway planning efforts, the history of the corridor with historic photographs, and contact information for more information. This should occur when the first significant implementation projects, associated with the byway, are under active construction.

- Brochure/mailer to have a brief summary of the history of the corridor and the history of the construction of the flood control channel and parkway. History should include period photographs.
- Brochure/mailer to outline safety improvement plans and the benefits to parkway users *and* local residents in the communities along the parkway.
- Brochure/mailer to provide information and direction to a website and toll-free number for information regarding the Arroyo Seco Parkway and the planning process.

2.7

Actions for Maintaining the Parkway

“At most seasons of the year...a small trickle of water among stones in a wide, deep wash, overgrown with button willow and sycamores....Tiny gold and silver backed ferns climb down the banks to drink, and as soon as the spring freshet has gone by, brodiaeas and blazing stars come up between the boulders worn as smooth as if by hand.

--Mary Austin, California author, circa 1900

Great ideas and great accomplishments are of limited value if their care and maintenance after the celebratory ribbon cutting go unheeded. A clear maintenance program, staff and funding is a requirement to ensure community pride in any resource. It is further recognized that comprehensive maintenance plan, over time, reduce overall maintenance expenses and greatly increase the return on the initial investment.

Management Entity

In order to best maintain and manage the unique transportation resource that is the Arroyo Seco Parkway will require a commitment to a high level of service from not only Caltrans maintenance teams, but also a number of other Caltrans divisions and regional organizations involved in planning and management decisions for the parkway. Good maintenance cannot exist without a comprehensive understanding of a resource such as the Arroyo Seco Parkway, and such an understanding requires that all decisions and goals take into account the real needs for long term care of the parkways structures, features and landscape. As one of the goals of this management plan is to view the Arroyo Seco corridor as a comprehensive whole with a distinguishing landscape, it is inappropriate to begin this process with a Balkanized view of the multiple resources throughout the corridor—right-of-way lines, park boundaries and municipal lands. The Arroyo Seco corridor must be viewed in the traditional parkway sense with an apparently seamless relationship among roadway, environment, recreation and community. This will require greater communication among agencies and organizations currently charged with or engaged in maintenance and earlier communication between agencies and organizations proposing changes to the parkway and its environment with the individuals charged with day-to-day maintenance activities.

RECOMMENDED ACTIONS

ACTION 2.7-1

Maintenance and Facility Analysis



Chain-link fence in front of historic rock face wall creates a maintenance problem.

A comprehensive analysis of current maintenance practices and parkway facilities is needed to assess the ability of Caltrans maintenance staff to manage the parkway based on the goals and recommendations of this corridor management plan.

- Review all existing maintenance activities (repair, litter removal, graffiti clean-up, mowing, weeding, pruning, sweeping and irrigation) to determine the ability of current staffing and funding to meet the goals and objectives of managing the Arroyo Seco Parkway as an historic facility.
- Identify current redundant systems or structures that, by their nature, increase maintenance needs or complicate routine maintenance activities.
- Identify needed access points to the right-of-way for better maintenance or to improve the safety of Caltrans staff.
- Identify areas or resources in need of enhanced security, police presence or community involvement to improve maintenance.
- Identify activities and areas in which a parkway organization or community service organization could assist Caltrans maintenance efforts (litter removal, landscape maintenance, incident reporting).

ACTION 2.7-2

Graffiti Removal

Graffiti or “tagging” has visually scarred the Arroyo Seco Parkway and diminished the appreciation for many of its historic features. It has been proven that the prompt, professional and consistent removal does reduce graffiti. Current policies for removal of graffiti within 24 hours or as quickly as possible should be continued and supported.

- Outreach and coordination with municipal and community programs to combat graffiti as a social problem should be undertaken in addition to traditional focus of Caltrans’ eradication program.
- The financial, labor and traffic implications (lane closures) for graffiti eradication should be reviewed and quantified within the recommendations and goals of this plan to determine the resources needed to effectively combat the problem.
- Graffiti on natural stone, unpainted concrete or metal surfaces should be scrubbed using approved cleaning solutions and applications methods. Under no circumstances shall natural or metallic surfaces that have been defaced with graffiti be “painted out”
- All painted surfaces defaced with graffiti should be repainted. Paint should exactly match the color or colors of the painted surface and shall be consistently applied and paint colors shall be archived and recorded. To minimize the “patch”

appearance of fresh paint directly over and defined by the defaced area, painted surfaces should be repainted in blocks bound by the nearest edges defining a contiguous area of the surface such as, control joints, expansion joints, ledges, bases, pillars, pilasters or decorative features.

ACTION 2.7-3

Parkway Maintenance Yard

In order to properly maintain the Arroyo Seco Parkway in the most efficient manner, a maintenance yard/facility should be specifically designed and located within the parkway corridor or in a location that provides easy access to the parkway. As a unique and special resource, the parkway will require space for the stockpiling of materials unique to the parkway (lighting, barriers, plant materials, signs and cleaning supplies), service vehicles and a shop facility.

- stockpiling of parkway details and features for replacement due to vandalism or damage (guardrail, lights, interpretive information panels, sign shields) shall be accommodated at a specially designated parkway maintenance yard, or a specially designated area of an existing maintenance yard.
- Maintenance yard, if within the parkway corridor, shall be located in an area that has minimal negative impact on the visual or historic integrity of the parkway and should be properly screened. It should also minimize any impact to area residents.
- Opportunities for coordinated or shared maintenance resources/storage with other agencies charged with maintenance in the corridor should be considered.

ACTION 2.7-4

Caltrans Maintenance Structure

Develop a management structure which can be responsive to the requirements and needs for proper stewardship of the Arroyo Seco Parkway must be developed to nurture the stated objectives and obligations required in managing all activities for the Parkway. This corridor management plan recognizes that to maintain the Arroyo Seco Parkway in the manner recommended in this plan will likely require additional resources (staffing, equipment, training and facilities) that may be impossible to fully identify at this time. Therefore, it is essential that maintenance needs be regularly reviewed not only during the implementation phase of this plan, but also on a biennial basis over time.

- Identify maintenance staff needs for personnel, funding, supplies, equipment or training to manage the parkway as a historic facility.
- Identify partnership opportunities with local governments and regional nonprofit and advocacy organizations to assist with maintenance related issues and needs.
- Identify, through a byway organization, supplemental funding sources or opportunities to assist with parkway maintenance.
- Adopt-a-highway program to sponsor maintenance activities. To minimize sign clutter, adopt-a-highway sponsors to be recognized at a central location, such as a byway visitor center, rather than along the parkway.

THE ARROYO SECO PARKWAY, 2003
View to Downtown Los Angeles from Elysian Park



2.8 Fulfilling the Vision

“If, as the Greeks believed, the gods in their wandering made the first roads, then I daresay it is an act of piety to follow in their footsteps, and politically speaking, the best of all landscapes, the best of all roads, are those which foster movement toward a desirable social goal.

--John Brinkerhoff Jackson, Discovering the Vernacular Landscape



The truest success of any plan is in its ability to accommodate change and withstand time without losing sight of its original vision. The Corridor Management Plan for the Arroyo Seco Parkway offers a grand vision and many recommendations to see that vision become a reality. The true reality, however, will be in the efficient implementation of the identified actions and in an appreciation for the community, maintenance, political and financial needs to sustain the parkway projects over time.

Streamlining the Process

The current regulatory environment of safety and environmental mandates require the practical application of a multitude of identified issues into this plan in order to allow improved operation of the parkway into the future. Because this plan was created with the desire to provide the residents of the corridor with an improved facility as quickly as possible, it has been designed based on the lofty goals outlined but presented herein with a structure that allows for easy application of parkway goals against review and approval processes needed to fulfill the vision.

This corridor management plan has been designed with an understanding of and in response to the requirements for approval regulatory agencies with jurisdiction over the parkway and its environs have established. This plan will provide specifications and treatment guidelines for many cultural and natural corridor elements by addressing the following regulatory mandates and subsequent revisions:

- California Environmental Quality Act (CEQA)
- National Environmental Protection Act (NEPA)
- National Historic Preservation Act (NHPA)
- Section 106
- National Transportation Act (NTA)
- Section 4(f)

In addition to regulatory mandates, the plan will also address the recommendations and advice of the following:

-American Association of State Highway and Transportation Officials (AASHTO)

The practice of cultural resource management takes into account the varied elements of our historic and cultural legacy. From landscapes to civil engineering elements to buildings and structures it is through the combined methods or sciences that have been developed for these particular elements over the last three decades that this plan has been developed.

RECOMMENDED ACTIONS

ACTION 2.8-1

Create an Independent Parkway Organization

To properly ensure the continued appreciation for the nationally significant Arroyo Seco Parkway, an independent parkway organization should be created. With representatives from the communities along the parkway; local governments; Caltrans; Los Angeles County Watershed Management Division; historic, cultural and recreational organizations; and transportation safety experts, the organization should serve as the single voice representing parkway users and act as a liaison among the various activities (environmental, preservation and community) occurring within the parkway corridor.

- The parkway advocacy organization should be a registered 501c(3) organization and have offices along the parkway corridor.
- The parkway organization should fulfill the management/public participation/information activities required as a National Scenic Byway.