Placerville Drive Multi-Modal Corridor Mobility Study

Final Report January 28, 2009







Table of Contents

Executive Summary	Page i
Chapter 1: Introduction, Process Undertaken and Results	Page 1
Chapter 2: Placerville Drive Assets, Issues and Opportunities	Page 7
Chapter 3: Need and Purpose of the Project	Page 13
Chapter 4: Concepts Development and Screening	Page 15
Chapter 5: The Stakeholder Advisory Committee Recommended Alternative	Page 33
Chapter 6: Conclusions and Next Steps	Page 47
List of Exhibits	
Exhibit ES-1: Placerville Drive Corridor and Proposed Cross-Sections	Page ii
Exhibit 1-1: The Planning Process	Page 3
Exhibit 1-2: Placerville Drive Corridor and Proposed Cross-Sections	Page 5
Exhibit 2-1: Corridor Assets	Page 8
Exhibit 2-2: Corridor Issues	Page 10
Exhibit 2-3: Corridor Opportunities	Page 12
Exhibit 4-1: SAC Key Issues	Page 15
Exhibit 4-2: TAC Key Issues	Page 16
Exhibit 4-3: Existing Street Cross-Sections	Page 17
Exhibit 4-4: Long List of Concepts Illustrated	Page 18
Exhibit 4-5: Long List of Concepts Illustrated Continued	Page 19
Exhibit 4-6: Attributes of the Initial Nine Concepts	Page 20
Exhibit 4-7: Summary of Open House Responses	Page 21
Exhibit 4-8: Land Use Concepts for Placerville Drive	Page 24
Exhibit 4-9: Possible Cross-Section Options	Page 25
Exhibit 4-10: Land Use Concepts for Placerville Drive (Open House)	Page 27
Exhibit 4-11: Segment Options Screening Matrix	Page 30
Exhibit 5-1: The Process to Select the LPA	Page 34
Exhibit 5-2: Placerville Drive US 50/Forni to Ray Lawyer Drive	Page 35
Exhibit 5-3: US 50 to Ray Lawyer Drive Looking Northeast	Page 36
Exhibit 5-4: Visualization with 4 Lanes Plus Median	Page 37
Exhibit 5-5: Ray Lawyer Drive to Cold Springs Road Looking Southwest	Page 40
Exhibit 5-6: Visualization with 2 Lanes Plus Parking	Page 41
Exhibit 5-7: Regional Connections Proposed by City of Placerville	Page 42
Exhibit 5-8: Ray Lawyer Drive to Cold Springs Road Looking Northeast	Page 43
Exhibit 5-9: Visualization with 4 Lanes No Parking	Page 44
Exhibit 5-10: Order of Magnitude Cost Estimates	Page 45
Exhibit 6-1: Proposed Cross-Sections for Placerville Drive	Page 49
Exhibit 6-2: Example of Pedestrian Bulb Out from Portland, Oregon	Page 50
Exhibit 6-3: Example of a Median Pedestrian Refuge Area	Page 50



Executive Summary

The *Placerville Drive Multi-Modal Corridor Mobility Study* was a community-based transportation study focused on Placerville Drive in Placerville, California between the limits of the Placerville Drive-Forni Road interchange on the west and the new Placerville Drive/US50 interchange on the east. Working over a nine-month period in 2008, a diverse Stakeholder Advisory Committee (SAC) developed a concept for Placerville Drive that sets a vision to integrate future land use changes with a future destination/down-scaled, multimodal roadway facility.

Five SAC meetings and two Open Houses were utilized to fully develop the Purpose & Need for the project, and to identify, "vet," and screen a set of roadway concepts with the community. As a culmination of this process, a recommended alternative for Placerville Drive was developed by the SAC.

The roadway concept recommended by the SAC was reviewed and accepted by the City of Placerville Planning Commission and City Council on December 2nd and 9th, 2008 respectively. Following this, the El Dorado County Transportation Commission Board accepted the recommended roadway concept on December 11, 2008.

The recommended/adopted roadway concept consists of changing the existing 2-lane and 3-lane roadway which has no median control or landscaping and serves as a "regional/commuter" facility into a "destination/downscaled" roadway. The new roadway will have a landscaped median, controlled left-turns at select locations and intersections, and will include sidewalks, bicycle lanes and room for transit service needs. In addition, the Hangtown Creek Bridge will be reconstructed and is envisioned as widened for fourlanes, yet utilized as a two-lane facility until the additional capacity is required for traffic service. The recommended/adopted cross-sections consist of the following components and are illustrated in Exhibit E-1 on the following page.

- At the US50/Forni Road/Placerville Drive, implementation of the proposed interchange redesign as previously adopted by the City of Placerville.
- Between US50/Forni Road/Placerville Drive interchange to Ray Lawyer Drive, implementation of a four-lane (4L) cross-section plus bike lanes and medians.
- Between Ray Lawyer Drive and Cold Springs Road, a wider than required twolane (2L) cross-section plus bike lanes and medians that is "convertible" to a four-lane (4L) cross-section plus bike lanes and medians. The conversion is slated to occur if and when necessary as dictated by traffic volumes. Improvements elsewhere in the corridor may provide alternate opportunities for regional travel.
- Between Cold Springs Road and the newly improved and extended US50/Main Street/Placerville Drive interchange, a two-lane (2L) cross-section plus bike lanes and medians.
- The estimated cost to construct all components of the recommended/adopted concept is approximately \$15.6 million (in 2008 \$'s).

The "next steps" in this project development effort will be to secure funding, obtain environmental clearance, complete detailed design and construct the project. It is likely the project development will be phased by segment. In addition, as the recommended/adopted cross-section for Placerville Drive varies from the adopted



General Plan concept for Placerville Drive, a City of Placerville General Plan amendment is also envisioned as necessary prior to moving forward.



Figure ES-1: Placerville Drive Corridor and Proposed Cross-Sections



1. Introduction, Process Undertaken and Results

The *Placerville Drive Multi-Modal Corridor Mobility Study* was a community-based transportation study focused on Placerville Drive in Placerville, California between the limits of the Placerville Drive-Forni Road interchange on the west and the new Placerville Drive/US50 interchange on the east. This section describes first the process undertaken and guiding principles, then describes the vision for the corridor and finally concludes with a discussion of the preferred concept as developed from this process.

The Placerville Drive Multi-Modal Corridor Mobility Study was a nine-month planning effort that began in the late spring 2008. The effort was led by the El Dorado County Transportation Commission (EDCTC) and included the City of Placerville, El Dorado County, El Dorado County Transit Authority and an active group of community stakeholders. This group worked through a planning process that developed and assessed a variety of options for changing the character of Placerville Drive and ultimately selected a preferred concept for the roadway as described herein. The preferred concept grew out of the myriad of needs and interests each of the parties involved brought to the process and it

Six Goals Guiding the Placerville Drive Study Effort

- 1. Support smart and strategic land use decisions;
- 2. Efforts to provide congestion relief;
- Efforts to improve the efficient movement of people, goods and services;
- Efforts to encourage pedestrian, bicycle and transit mobility and access;
- 5. Efforts to have public and stakeholder participation; and
- 6. Supporting measures to reduce air pollution and global warming

Placerville Drive Stakeholders

- Broadway Village Association
- Community Pride
- El Dorado County Fair
- El Dorado County Government Center
- El Dorado County Chamber of Commerce
- M.O.R.E.
- Oetting Property
- Placerville City Council
- Placerville Downtown Association
- Placerville Drive Business Association
- Placerville Planning Commission
- Trails Now

responds to both the transportation and land use visions for Placerville Drive – based on the community's vision of the future.

The Placerville Drive Multi-Modal Corridor Mobility Study was funded through a Caltrans Community-Based Transportation Planning grant awarded to the EDCTC in 2007. As referenced in the application to Caltrans for this Community Design grant, six fundamental goals of the Community Design Grant program exist and were applied as guidance for this study.

With these as the guiding goals for

the *Placerville Drive Multimodal Corridor Mobility Study*, the effort undertook and completed a multi-step process that resulted in the selection of a "Stakeholder Advisory Committee Recommended Alternative" for a future Placerville Drive.

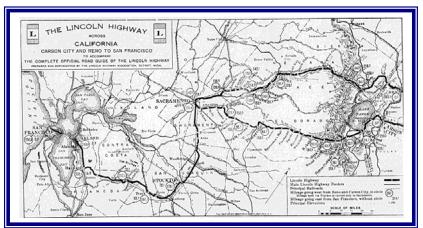


The Planning Process

The planning process undertaken for the *Placerville Drive Multi-Modal Corridor Mobility Study* was a multi-step effort that identified issues, vetted the issues with the stakeholders and then developed a "long list" of alternatives responding to the issues. The "long list" was then reviewed with the stakeholders and the public and screened down to a "short list" of alternatives and then vetted again with the community and ultimately a "Stakeholder Advisory Committee Recommended Alternative" concept was identified and selected by the stakeholders. This recommended concept is discussed herein. The study process and schedule is presented in Exhibit 1-1 on the following page.

Vision for the Placerville Drive Corridor

Placerville Drive, originally an integral component of the Pioneer Branch alternate route of



the trans-continental Lincoln Highway, owes its roots to the automobile. During the heyday of striporiented auto-centric development in the 1960's and 70's, development Placerville along Drive further reflected this spread land out use pattern with, in most small individual cases. parcels with driveways and parking fronting onto the

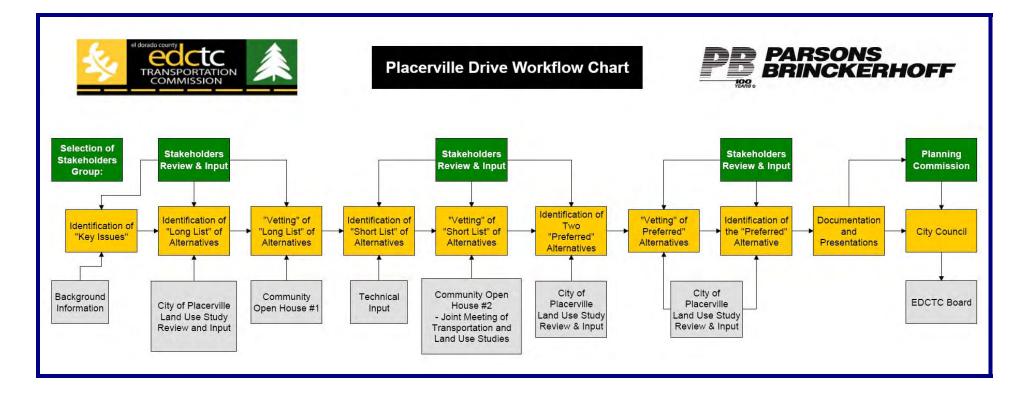
street dominating. With the 1980's and 1990's, development along the corridor remained generally auto-centric but with an orientation more towards off-street, larger-scale retail and office development. At the same time, bicycles and transit were included in the transportation mix and form, albeit as secondary players carrying a small percentage of the trips overall, but also serving an important function in the overall mobility needs of the community.

The 21st Century has brought a new twist and the community is looking beyond the present day in terms of developing a vision for this corridor. With petroleum prices doubling in a year and the price of oil peaking at near \$150 a barrel in the summer of 2008, gasoline prices were the most expensive in the history of the U.S. in "real dollar" terms.¹ What the nation's response to this unprecedented pricing for a gallon of gasoline over the long term will be remains to be seen. However, for the stakeholders group, the need and desire to move away from a strictly auto-centered street concept for Placerville Drive to a more multi-modal concept was clear and desired.

¹ In real (non-inflated) dollars terms, the price of a barrel of oil in the summer of 2008 exceeded the previous all-time high in 1980 of approximately \$95 per barrel. For more information on the historic pricing of oil (and gasoline), please see the website: <u>http://www.eia.doe.gov/emeu/steo/pub/fsheets/real_prices.html</u>.



Exhibit 1-1: The Planning Process





At the same time as the *Placerville Drive Multi-Modal Corridor Mobility Study* was underway, the City of Placerville was undertaking a land use study for the corridor. The *Placerville Drive Development & Implementation Plan*, was designed to develop a long-term land use vision for the corridor and is to be completed in early 2009. Because of the direct linkage and inter-relationship between transportation and land use, the two plans have advanced with a strong understanding, appreciation, and linkage between them in developing a consistent and focused vision.

The long-term vision for Placerville Drive, as defined by the stakeholders from both a transportation and land use perspective, has the following components:

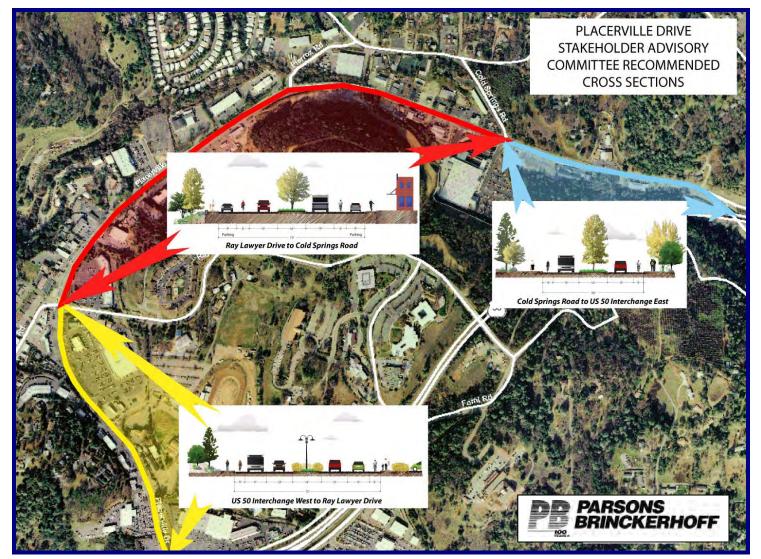
- A land use strategy that re-develops select areas within the corridor with a "Village Concept" of mixed-uses of office/retail/entertainment/residential uses. The "Village Concepts" are envisioned as between Pierroz Road and Ray Lawyer Drive and are envisioned as the "Central Village" and "Eastern Village".²
- A "down-scaled" Placerville Drive that serves as a "destination-oriented" facility, as opposed to a "commute-oriented/through-trip" facility with a mixture of modes including pedestrians, bicycles, transit, on-street parking, autos, and trucks making local deliveries.
- A facility with improved control of traffic turning movements through implementation of a center median with strategically located left-turn pockets, consolidation of driveways where feasible and re-routing of truck deliveries as necessary and where physically feasible.
- A widened and re-constructed Hangtown Creek Bridge designed to meet the nearterm travel requirements, as well as long-term needs if/when necessary.
- Hangtown Creek as a future improved recreation resource for the community.
- Enhanced street landscaping, public art, sidewalks, street-side activities, and store fronts.
- Identification and study of future "regional-serving" traffic routes to serve commute and regional traffic shifted off Placerville Drive.

Exhibit 1-2 illustrates the corridor and the proposed cross-section redesigns that have been developed from this effort.

² Please refer to the *Placerville Drive Development and Implementation Plan Study* (Land Use Focused) underway by the City of Placerville for further information.



Exhibit 1-2: Placerville Drive Corridor and Proposed Cross-Sections





This page intentionally left blank



Chapter 2: Placerville Drive Assets, Issues and Opportunities

Placerville Drive presents both a number of assets as well as a number of issues. These translate into opportunities to enhance the form and function of the roadway and adjacent land uses. In the development of the *Placerville Drive Multi-Modal Corridor Mobility Study*, these assets, issues and opportunities were reviewed at various times with the stakeholder advisory committee (SAC) in an effort to inform the decision-making process and selection of the locally preferred alternative.

Corridor Assets

The assets in the Placerville Drive corridor are varied and illustrated in Exhibit 2-1. Among the key assets are:

- Community interest and involvement in enhancing the form and function of the corridor as evidenced by the interest in this planning process (community and political desire for change);
- Transportation investments in the Placerville Drive corridor including the extension and connectivity of Ray Lawyer Drive; redesign and (future) reconstruction of the Placerville Drive/Forni Road & US50 interchange; the now under construction interchange with US50 at the east end of Placerville Drive including the extension of Main Street to connect with Placerville Drive (*public sector investments in the corridor*);
- Relatively recent private sector development such as the Home Depot and Raley's shopping center signaling an interest and value in the corridor (*private sector investment in the corridor*);
- Some relatively large and under-utilized parcels along the corridor and private sector interest and planning for significant new development (opportunity parcels for redevelopment);
- Transportation assets in the corridor including El Dorado Transit Authority services (commuter/park & ride connections at the Fairgrounds and local service routes along the corridor), bicycle lanes on Placerville Drive and regional trails nearby (*transportation investments to build upon*); and,
- Right-of-way (ROW) in the corridor (80 to 125 feet) that appears to be sufficient to accommodate the recommended improvements. However, it is noted that City of Placerville staff have identified locations where adjacent properties have encroached on the public ROW with parking. (*Potentially lower ROW impacts than in other locations means less cost and less disruption.*)

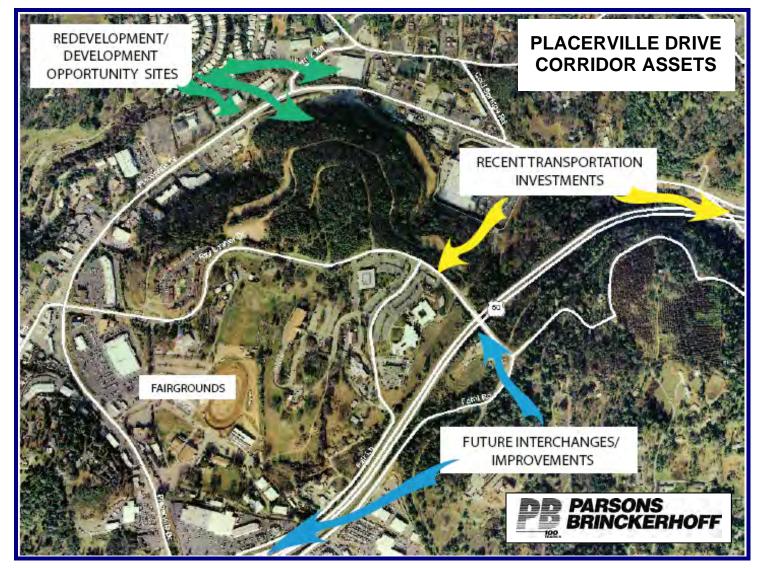
Corridor Issues

The Placerville Drive corridor also has a number of issues that detract from its value; Exhibit 2-2 illustrates these. Among the issues are:

• Land uses adjacent to Placerville Drive are generally highway-oriented with parking directly adjacent to the street and access provided by one-or-multiple driveways with minimal consideration to adjacent driveway placement. Higher revenue-generating land uses are locating elsewhere in the County with better access and street design. (Land use is outmoded as older strip commercial is no longer as competitive. Auto-centric small-lot access creates hazards in some locations);



Exhibit 2-1: Placerville Drive Corridor Assets

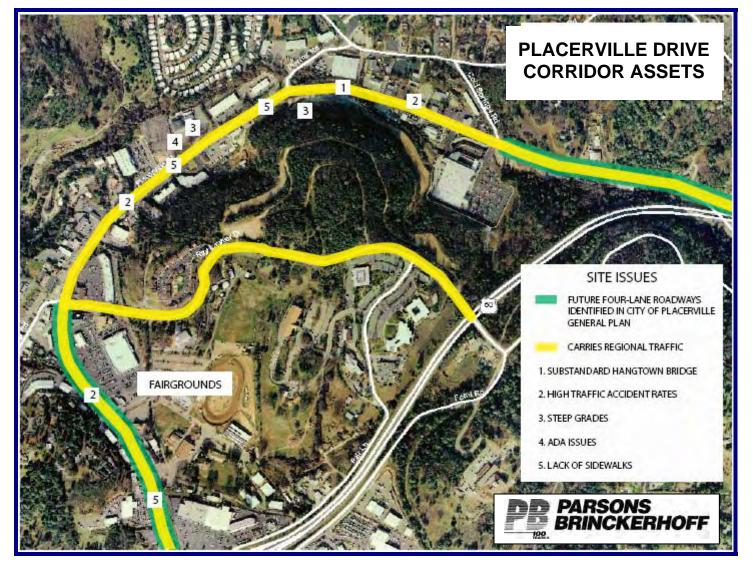




- The regional nature of traffic (perceived by some) is inappropriate for this area and the corridor should become a more destination-oriented corridor as an extension of Main Street in downtown Placerville. (Is the function of Placerville Drive to be "regional/commuter oriented" or "destination-oriented" in the future? What is the goal/vision?)
- A much-higher-than statewide average accident rate for this section of Placerville Drive as compared to a statewide average for similar facilities. This higher accident rate appears to be a function of the multiple driveways, as well as the two-way left-turn lane in the center of the roadway. (*The corridor has a traffic problem today*);
- Based on traffic forecasts, the City of Placerville identifies in the Transportation Element of the General Plan that Placerville Drive, west of Ray Lawyer Drive will become a four-lane (4L) facility; east of Ray Lawyer Drive will stay a two-lane (2L) facility; and east of Cold Springs Road will become a four-lane (4L) facility with a center left-turn lane. Intersections are forecasted to operate at capacity during the peak hours. (The corridor is forecasted to be a problem in the future assuming present land use development patterns and travel characteristics. Locally preferred alternatives that propose alternate cross-sections would require a General Plan amendment [or similar] to be consistent);
- A lack of sidewalks in most locations along the corridor and generally lacking on both sides of the roadway exists; this is especially critical in areas where wheelchair usage tends to be focused (e.g., near the M.O.R.E. facility); cross-walk opportunities are limited to the few signalized intersections spread ½-mile or more apart. (Pedestrian usage is limited, ADA compliance is lacking and potential auto/pedwheelchair hazards exist);
- Overhead utilities exist along much of the corridor. (Creates an unsightly context and potentially problematic situation for vehicles);
- The Hangtown Creek Bridge is substandard in terms of width and has structural issues identified by Caltrans requiring remedies. *(Creates a potential hazard);*
- Right-of-way in the corridor (80 to 125 feet) appears to be sufficient to accommodate improvements. However, it is noted that City of Placerville staff have identified locations where adjacent properties have encroached on the public ROW with parking. (*The corridor can be modified to a large extent without adversely affecting most adjacent properties, but some impacts to parking are envisioned);* and,
- Grade issues (generally steep grades rising to the south and east and dropping off to the north and west between the west side of Ray Lawyer Drive to Cold Springs Road and then very steep grades rising to the north and west from Cold Springs to US50) will force the alignment to be engineered in a fashion to minimize costs to the extent possible. This will result in shifting the roadway centerline and relatively more or less encroachment on one or the other side of the existing street to accommodate a future widening. (In some areas, widening may impact properties more than elsewhere along the corridor.)



Exhibit 2-2: Placerville Drive Corridor Issues





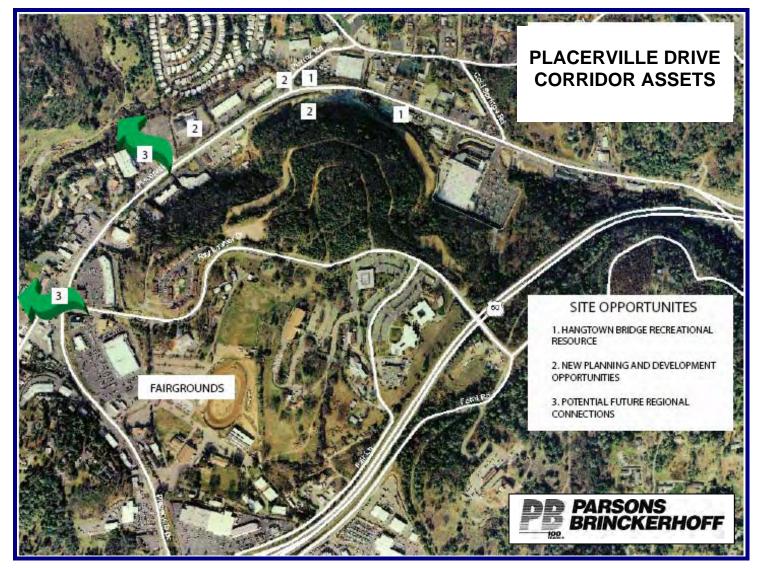
Opportunities

Working with the various stakeholders, there were a number of opportunities identified along Placerville Drive that can contribute to an improved facility with long-term value to the community. These opportunities are illustrated in Exhibit 2-3 and noted below.

- Community interest in improving and redefining the form and function of Placerville Drive is high and oriented towards "destination orientation" first with commuter/regional traffic secondary and carried by other roadways in the future;
- Hangtown Creek provides a potential, albeit with a complex right-of-way, environmental permitting and design challenge, opportunity for enhancing the recreational and trails aspect of this community;
- The Hangtown Creek Bridge itself has relatively secure funding for reconstruction "in place". The outcome of this planning effort will influence the ultimate width of this bridge.
- The public investment in the corridor, as well as the proposed private sector investment (e.g., the Oetting Property) reflects the interest and commitment to changing the fabric and character of Placerville Drive;
- The concurrent *Land Use and Implementation Study* underway by the City of Placerville is focused on developing a series of destination-oriented "villages" along this corridor, principally between Ray Lawyer Drive and Pierroz Road. This land use plan, if implemented, presents the opportunity to change the nature and function of Placerville Drive; and
- Potential "Regional Connectivity" routes were explored in the course of this effort and are discussed herein. These routes, if ultimately implemented, would draw traffic away from Placerville Drive which is an opportunity for the corridor to change its nature.



Exhibit 2-3: Placerville Drive Corridor Opportunities





Chapter 3: Need & Purpose for the Project

The need and purpose for changes to Placerville Drive was determined by the Stakeholder Advisory Committee (SAC) based on their own appreciation of the issues, as well as the information presented to them. At the August 13, 2008 SAC meeting, the following "need & purpose" statement was adopted by the SAC:

Placerville Drive, former Highway 50 and "the Lincoln Highway", carries a high level of traffic with above-average accident rates and has limited and intermittent sections with sidewalks, bike lanes, and transit stops. Traffic volumes on Placerville Drive are approximately 16,500 vehicles per day near the Fairgrounds, 19,500 vehicles per day near Hangtown Creek, and 13,500 vehicles per day near Cold Springs Road. Traffic volumes are projected to increase by over 20% in the next 15 to 20 years based on growth in the community. Other modes of transportation such as bicycles, transit and walking are limited due to the lack of adequate facilities such as sidewalks, as well as the existing placement and mix of land uses.

Land uses along Placerville Drive are now being re-assessed by the City of Placerville with their goal being to transform this corridor into a more "village-like" mix and form.

Thus, there is a <u>need</u> for street improvements to serve the evolving transportation and land use mix along Placerville Drive.

The <u>purpose</u> of the *Placerville Drive Multi-Modal Corridor Mobility Plan* is to articulate a vision that balances the need for vehicular access and capacity, while serving and complimenting a future corridor that increases pedestrian/bike/transit opportunities, enhances non-auto-dominant land uses, and improves user safety at every opportunity.

With this as the basis for developing new street concepts for the future of Placerville Drive, an alternatives development and screening process was undertaken and completed. The completion of this process resulted in the selection of a locally preferred alternative for the corridor. The alternatives development and screening process is presented in the following chapter and the locally preferred alternative is discussed in Chapter 5.



This page intentionally left blank



Chapter 4: Concepts Development and Screening

Introduction and Overview

The *Placerville Drive Multi-Modal Corridor Mobility Study* was a four-step effort that entailed concept identification, screening, refining and re-screening occurred over an approximate nine-month period of time. The process entailed technical work by the client/consultant team (Team), input, review and refinement by the SAC, presentations to the public on two occasions for review and input and final refinement by the entire Team. A "long list" of nine (9) possible street design concepts was developed by the Team, screened with the Stakeholder Advisory Committee and the general public and then refined to a short list. This short-list was, in turn, further refined and screened to a shorter list of potential concepts. Finally, this "very short list" of concepts was reviewed with the stakeholders and the City and refined into a final Stakeholder Advisory Committee Recommended Alternative.

A detailed screening matrix was prepared (presented as Exhibit 4-11 herein). Based on the screening assessments of the SAC, two concepts were identified as the "preferred" concepts by equal members of the SAC. Subsequent to that effort, a final SAC meeting was held in October, 2008 with the City of Placerville staff and their land use consultant to develop a recommended alternative. A hybrid ("convertible") concept was proposed at this last meeting and it was adopted as the Stakeholder Advisory Committee Recommended Alternative for Placerville Drive.

This section describes the process, concepts and the results of this effort. The recommended alternative concept for Placerville Drive consists of the key attributes presented in Exhibit 5-1 in the following chapter.

Long List of Concepts

A "long-list" of nine (9) concepts was developed by the Team based on the input received from the SAC and the Technical Advisory Committee (TAC) comprised of the City of Placerville Public Works and Community Development departments, El Dorado County Public Works and El Dorado County Transit. Exhibits 4-1 and 4-2 illustrate the "key issues" identified by each of these groups as important in the selection of a preferred alternative for Placerville Drive.

The existing cross-section(s) on Placerville Drive are shown in Exhibit 4-3. The roadway varies in width, but has essentially one lane in each direction with a center two-way turn lane.

Following the initial data gathering efforts and meetings with the SAC and TAC, a set of nine concepts for changing the

Exhibit 4-1: SAC Key Issues

Key Issues from SAC (in alphabetical order)

- 1. Business access needs to be maintained and enhanced;
- Commercial loading/unloading is both problematic and needs to be improved;
- 3. Hangtown Creek Bridge is narrow and "dangerous";
- 4. Image of Placerville Drive is poor; landscaping needed;
- Parking ~ off-street and on-street is important and needs to be improved;
- 6. Safety of autos, peds is paramount;
- 7. Topography represents a challenge for peds, drainage, and safety; and
- 8. Varying lane widths creates confusion

Source: SAC Meeting #1; May 20, 2008



nature of Placerville Drive was developed. This "long-list" of concepts was intended to cover the breadth of options available to the community irrespective of the impacts on the roadway or the likes/dislikes of the various study participants.

The "long-list" of concept alternatives consisted of nine different concepts ranging from "Do Nothing" to widening Placerville Drive to six lanes plus frontage roads. The nine concepts

are discussed below and presented as cross-sectional concepts in Exhibits 4-4 and 4-5.

- Alternative #1 "Do Nothing" ~ Maintaining the "existing conditions" as Placerville Drive is today (as illustrated in Exhibit 4-4);
- Alternative #2 "Minimal Changes" ~ Making only very minimal changes to the roadway in select locations as required from new development and/or based on traffic-related needs over time; And,
- Alternative #3 "2-Way Couplet" ~ Develop a "2-Way Couplet" between Cold Springs and Pierroz Road with the northbound direction utilizing the existing Placerville Drive and the southbound direction using a redefined and widened Cold

Exhibit 4-2: TAC Key Issues

TAC Key Issues (in alphabetical order)

- Adding ped facilities to corridor is important; mid-block uncontrolled ped crossings are a concern;
- City level of service (LOS) policy is presently "C", yet "D" is realistic;
- 3. Community will be decision-makers in determining theme and scale;
- 4. Hangtown Creek represents a community recreation resource;
- 5. Placerville Drive is designated for "super trucks" (70 feet in length) and needs to continue as such; and
- Providing adequate U-Turn space at intersections and left-turn areas is necessary

Source: TAC Meetings March 26, 2008 and April 17, 2008

Springs and Pierroz Road(s). This concept would require a reconstruction and widening of both crossings of Hangtown Creek (at Placerville Drive and at Pierroz), as well as some re-alignment of the roadway access and the EDCTA transit route.

Exhibits 4-4 and 4-5 on the following pages illustrates the conceptual cross-sections under consideration whereby Placerville Drive could stay as it is today with the addition of a median (Alternative #4) could be narrowed (Alternative #6) or could be widened to essentially a six-lane facility (Alternative #9).

A summary of the attributes associated with each of these nine concepts is presented in Exhibit 4-6 on page 20.



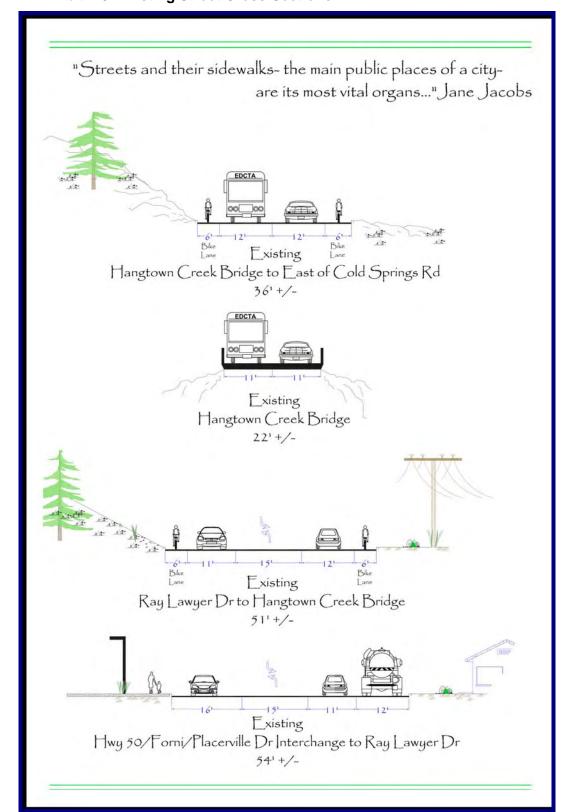
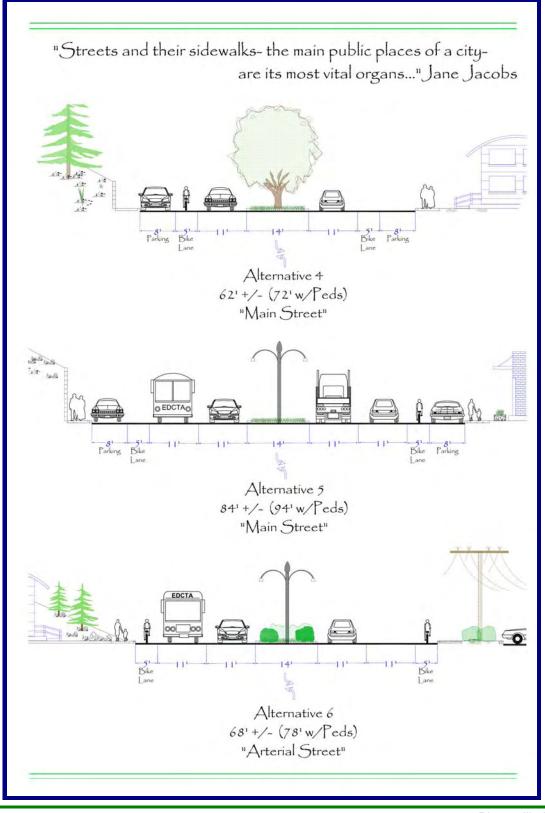






Exhibit 4-4: Long List of Concepts Illustrated



January 28, 2009



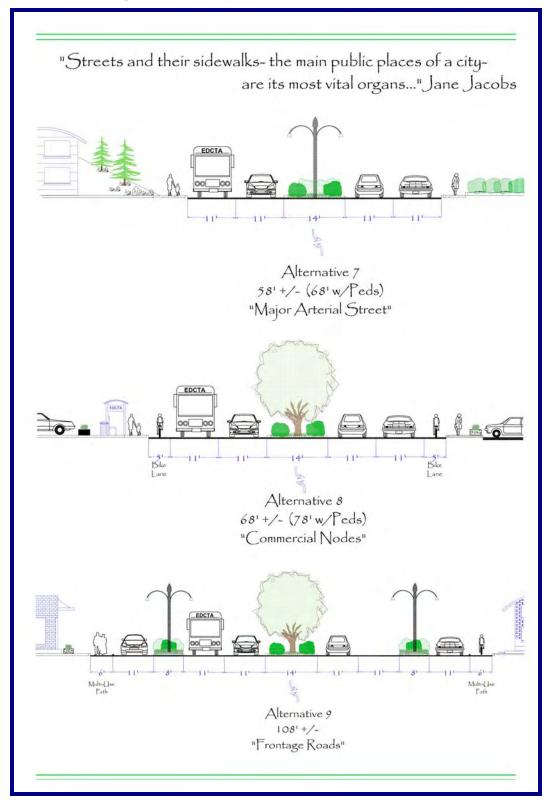






Exhibit 4-6: Attributes of the Initial Nine Concepts

	PLACERVILLE DRIVE MULTI-MODAL CORRIDOR MOBILITY PLAN																				
		Mobility Options Concept/Access Type												Theme							
		concept, nocess type														Theme					
0	Transit Care	Biller Conte	Side Longers of	 	an Inter	* cisau, **	C. Jones	0 See	Contract Port	Luts "led" They	849 -	Building	Cites .	10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	Street Control	Theme					
1	Yes	~	Varies		Varies	No	No	No	No	Г	~	No	No		Varies	"Do Nothing"					
2	Yes	~	Varies		Varies	No	No	No	No	E	~	No	No		Varies	"Minimal Improvements"					
3	Yes	~	Varies		Varies	No	~	No	No		~	No	No	No	Varies	"Minimal Improvements" + Couplet					
4	Yes	~	~		2 Lanes	~	No	1	~	1	No	No	No	~	Up-Close	2 Lane "Main Street"					
5	Transit Lanes?	~	~		4 Lanes	~	No	~	~		No	~	No	~	Up-Close	4-Lane "Main Street"					
															-						
6	Yes	~	~		4 Lanes	~	≯	No	~		>	1	No	No	Set-Back	4-Lane "Arterial Street"					
7	Yes	No	~		4 Lanes	~	No	No	No		~	~	No	No	Set-Back	4-Lane "Major Arterial Street"					
8	Yes	~	√		4+ Lanes	~	No	No	~	1	~	~	~	No	Set-Back	4-Lane "Commercial Node" Arterial					
9	Yes	~	Shared		4+ Lanes	-	No		~	F	~	~	~	No		4-Lane + Frontage Roads					
																-					



Screening the "Long List" of Concepts

A "screening" of the long-list of concepts was undertaken through discussion and review with the community, as well as detailed discussions and review by the Stakeholders Advisory Committee.

The nine concepts were presented to the community at a public Open House on Thursday, May 29th, 2008 at the El Dorado High School Gym in Placerville, CA. The Open House was attended by approximately 20 individuals representing various elements of the community as well as the City of Placerville Public Works Director. Attendees of the Open House were provided an opportunity to respond to the concepts and express their preferences. The result of these responses is shown in Exhibit 4-7 below.

PLACERVILLE DRIVE MULTI-MODAL CORRIDOR MOBILITY PLAN Results of Informal Survey from Placerville Drive Open House #1 -- May 29, 2008 Comparative Strongly No Strongly Weighted Dislike Like Concept Dislike Opinion Like Score Rank 9th (Last) 0 1-Do Nothing 11 0 0 0 -22 2-Minimal 5 3 3 0 0 7th -13 Improvements 3-Minimal Improvements + 2 2 2nd 1 0 6 4 Couplet 4-2 Lane "Main 1 0 1 35 55 12 5 1st Street" 5-4 Lane "Main 3 3 -4 3 1 1 3rd Street" 6-4 Lane Arterial 2 5 1 2 1 -5 4th 7-4 Lane "Major 6 2 3 0 0 -14 8th Arterial" 8-4 Lane "Commercial Node" 5 3 0 -10 2 1 6th Arterial 9-4 Lane Arterial + 5 0 5 1 0 -9 5th **Frontage Roads** "Weights" 0 1 2 -2 -1

Exhibit 4-7: Summary of Open House Responses

Source: Parsons Brinckerhoff, 2008



Based on the information gathered at the Open House, two distinct response patterns were identified:

- Concept #4 (2 Lane "Main Street") had <u>the most community support</u>, followed by Concept #3 (Minimal Improvements + Couplet)
- Doing nothing (or minimal improvements) as Concepts #1 (Do Nothing), #2 (Minimal Improvements), and #7 (Major Arterial) had <u>no support</u> within the community;

Other key response patterns were:

- Concepts #5 (4-Lane "Main Street") and #6 (4 Lane Arterial) were <u>unfavorable</u> <u>overall</u> but with some community support noted; and,
- Concepts #8 (Commercial Node Arterial) and #9 (4 Lane Arterial + Frontage Roads) had <u>minimal support</u> within the community.

The results of the Open House were then reviewed with the SAC and the SAC then screened the draft concepts with the following results:

- Concept 1 (Do Nothing) <u>was rejected</u> as not resolving the problem or meeting the purpose and need for the corridor;
- Concept 2 (Minimal Improvements) was rejected as not resolving the problem or meeting the purpose and need for the corridor;
- Concept 3 (Minimal Improvements + Couplet) <u>was retained</u> but only the "Couplet" component – for further study;
- Concept 4 (2-Lane Main Street) was rejected due to the on-street parking element although a "2-Lane" concept without on-street parking might be appropriate in segments within the corridor;
- Concept 5 (4-Lane Main Street) was rejected due to the on-street parking element;
- Concept 6 (4-Lane Arterial Street) <u>was</u> <u>retained</u> for further study;
- Concept 7 (4-Lane Major Arterial Street") <u>was rejected</u> as it did not include bicycle lanes;

Results of Open House #1

- Doing nothing and making only minimal improvements was rejected.
- Widening Placerville Drive to a major 6-Lane arterial standard was rejected.
- Variations of widening to a 4-Lane roadway were retained.
- Concept 8 (4-Lane Commercial Node) <u>was retained</u> (it was noted that the difference between this and Concept 6 was essentially the "control" [and combining of] of driveways and curb-cuts along the corridor; and
- Concept 9 (4-Lanes + Frontage Roads) was rejected as not meeting the purpose and need for the corridor.



Hence, the "Long List" of concepts was screened down to a "short-list" of concepts consisting of:

- 1. With reservations of some on the SAC, a "couplet" concept with Placerville Drive one-way north/eastbound and Cold Springs Road and Pierroz Road one-way south/westbound;
- 2. A "4-Lane Arterial Street" concept; and
- 3. A "4-Lane Commercial Node" concept (it was noted that the difference between this and the 4-Lane Arterial concept above was essentially a to be determined level of "control" [and/or combining of] of driveways and curb-cuts along the corridor).

In addition to the screening previously noted, the SAC also provided the Team some direction and details of their vision for a future Placerville Drive. Among the vision elements provided are the following "key" ones:

- The Placerville Drive corridor should not be viewed as a "one size fits all". Rather the concept of "segmentation" of the corridor was applicable especially when it relates to the various land use scenarios that were being proposed. Having an appropriate street cross-section consistent with the future land use was paramount.
- Narrowing down to two-lanes from a point east of Hangtown Creek towards the existing two-lane section under the new US50 interchange;
- Establishing an underground utility corridor; providing shade trees in the median and "alternating trees and street light standards" was important for the future beautification of Placerville Drive;
- On-street parking on Placerville Drive was not appropriate;
- Providing transit bulb-outs at key locations for transit use;
- Concern about providing uncontrolled (i.e., not signalized) mid-block pedestrian crossings, as well as maintaining sufficient street width at key intersections to allow "super trucks" to make U-Turns was also noted.

Screening the Short-List of Concepts

Based on the direction received from the SAC, the short-list of concepts was then further refined and screened again by the community, as well as the SAC. The SAC met for the third time in August 2008 and discussed the results of the previous screening efforts.

As part of this discussion, the transportation elements common to the land use concepts developed for the *Placerville Drive Development and Implementation Plan* (land use focused) by the Land Use Team under contract to the City of Placerville, Community Development Department were also reviewed. Exhibit 4-8 illustrates the general land use concepts under study by the land use consultant and Exhibit 4-9 illustrates the linkage between the two (2) land use concepts and the various transportation roadway strategies that could be employed to provide compatibility.



Exhibit 4-8: Land Use Concepts for Placerville Drive

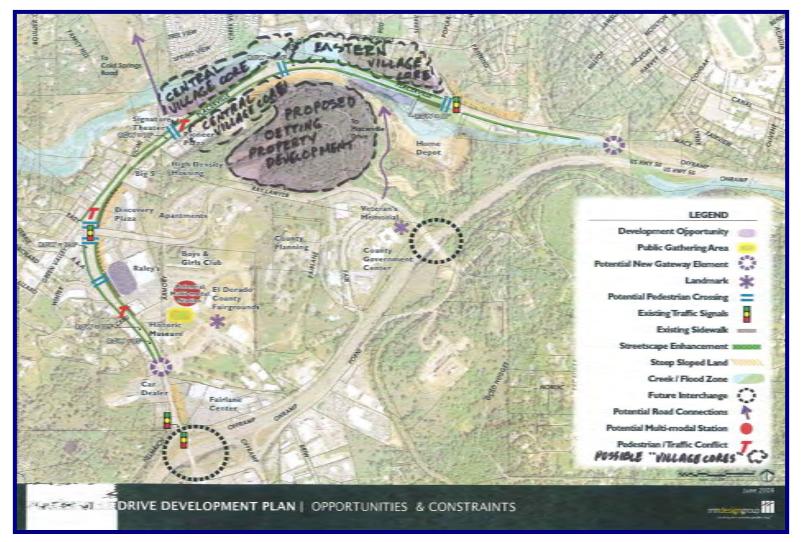




Exhibit 4-9: P	ossible Cross-Section C	ptions								
Segment and Features	A. Eastern Village Core	B1. Central Village Core with Couplet	B2. Central Village Core w/o Couplet							
"Southern Segment"- US50 (West) to Ray Lawyer Drive	4 Lanes (2 in each direction) with center median and lef pockets; No on-street parking									
"Central Segment" – Ray Lawyer Drive to Pierroz	2 Lanes (1 in each direction) with center median and left-turn pockets; <i>On-street parking?</i>	4 Lanes (2 in each direction) with center median and left-turn pockets; No on-street parking	4 Lanes (2 in each direction) with center median and left-turn pockets; <i>On-street</i> <i>parking?</i>							
"Eastern Segment" - Pierroz to Cold Springs	2 Lanes (1 in each direction) with center median and left-turn pockets; <i>On-street parking?</i>	Couplet -2 Lanes (each direction); No median; Bike lanes on right; <i>On-street</i> <i>parking?</i>	4 Lanes (2 in each direction) with center median and left-turn pockets; <i>On-street</i> <i>parking?</i>							
Hangtown Creek Bridge" Segment	Striped for 2 Lanes + Median + Bike Lane + Pathways; No on-street parking	Striped for 2 Lanes + Bike Lane + Pathways; Requires similar for Pierroz Xing of Hangtown Creek; No on- street parking	Striped for 4 Lanes + Median + Bike Lane + Pathways; No on- street parking							
"Transition" Segment - Cold Springs to US50(East)	•	direction) with center ckets; No on-street po								
Roundabouts or "Pork Chops"?	Roundabout at Fair Lane & US 50(west) only (Same as "B2")	Also a Roundabout or "Pork Chops" at Pierroz & Cold Springs with	Roundabout at Fair Lane & US 50(west) only (Same as "A")							
Transit Bike Lanes		xisting & Future Stops								
Sidewalks	Class 2 (On-street and Striped) throughout length Continuous except where infeasible									

Exhibit 4-9: Possible Cross-Section Options

Source: Parsons Brinckerhoff based on land use concepts developed by RRM Consulting (Working options-August 13, 2008 Revised)



Of note were the following items that were subsequently reflected in the screening process and ultimately selection of the locally preferred alternative:

- Transit elements (shelters, signing, bulb outs where feasible), continuous bikeways and sidewalks along both sides of Placerville Drive (except in possibly some segments on the north side of Placerville Drive, east of Cold Springs Road, due to the grades);
- A continuous landscaped median irrespective of the street configuration with left-turn pockets at "strategic" locations and signalized intersections;
- The desire of the land use consultant and process to have on-street parking in some segments of Placerville Drive (which was contrary to the conclusion of the SAC at the end of SAC Meeting #2) was determined to be "OK" in certain locations provided such issues as sight distances and driveway locations could be worked out to eliminate conflicts and safety issues;
- Traffic control elements including median left-turn pockets in strategic locations, intersection designs to ensure and accommodate the turning movements by semitrucks making U-Turns and Roundabouts at select locations were deemed appropriate and of continued interest;
- For the "Southern Segment" (defined as from the Hwy50/Placerville Drive/Forni Road (west) interchange to Ray Lawyer Drive) would be four lanes (4L) without on-street parking;
- A 2-lane cross-section between Ray Lawyer Drive and Cold Springs Road was deemed worth further study but this provided that "maintaining the current status" of Placerville Drive would best be accomplished in conjunction with other "regional" improvements to accommodate the existing and forecasted through traffic;
- Due in part to the funding feasibility for widening Hangtown Bridge to a 4-lane crosssection, a 4L concept between Hwy50 (west) and Cold Springs Road was deemed worth further study;
- For the "Transition Segment" (defined as from Cold Springs Road to the Hwy50/Placerville Drive/Main Street Connection (east) new construction as two-lane (2L) section with a median and controlled left-turn access; and,
- The "Couplet" concept was not favored by the SAC (but was carried forward into Open House #2 to gage the community interest in this concept).

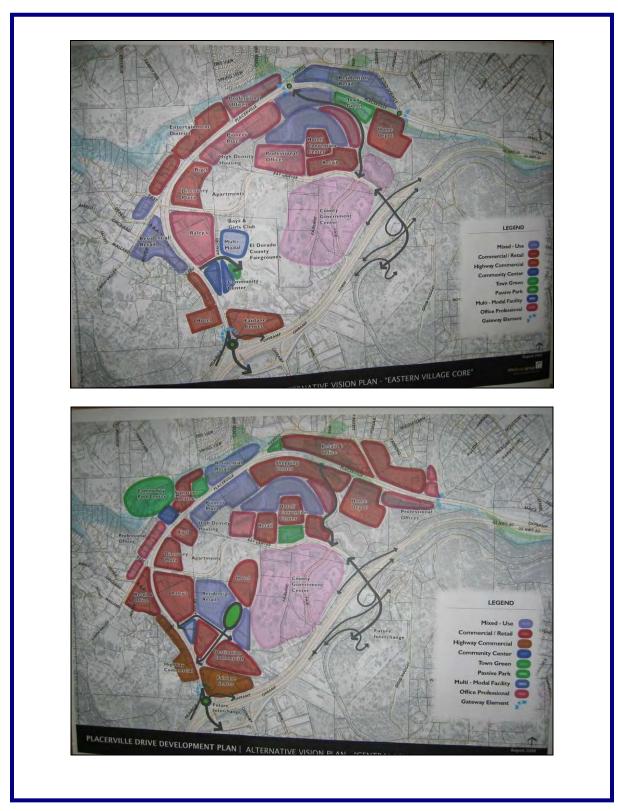
Open House #2

Following the meeting of the SAC, Open House #2 was held jointly with the Land Use Team developing future land use concept(s) for Placerville Drive and under contract to the City of Placerville, Community Development Department. This Open House was held on August 20, 2008 and was attended by approximately 25 individuals including several members of the Placerville City Council. Again the attendees were given the opportunity to review the transportation concepts, within the context of the proposed land use concepts for Placerville Drive.

Exhibit 4-10, on the following page, illustrates the land use concepts presented at the Open House as part of the *Placerville Drive Development and Implementation Plan* effort.



Exhibit 4-10: Land Use Concepts for Placerville Drive (As presented at August 20, 2008 Open House)





Fifteen (15) attendees responded with comments on the concepts as presented. The results of these responses are as follows:

- The "All 4-Lane" concept received the most favorable responses from the public;
- The "Combined 4-Lane + 2-Lane Segment" received the second most favorable number of responses;
- The "Couplet" concept received only 1 favorable comment and was rejected by all other respondents; and
- Integrating the transportation with future land uses and a desire for "diagonal parking" were two comments also expressed.

Final Screening

With the information from the Open House and the previous Stakeholder Advisory Committee meetings as input, the Team and the Stakeholder Advisory Committee prepared a final screening matrix (Exhibit 4-11) that assessed the ability of various cross-section concepts to achieve a set of project goals. The Placerville Drive corridor was separated into three (3) segments as the cross sections "in play" varied somewhat between the sections. As illustrated in Exhibit 4-11, three segments exist for the purposes of this final screening exercise.

- <u>US50/Forni to Ray Lawyer Drive.</u> This segment was, in all cases, proposed to be a 4-Lane facility with landscaped medians and left-turn pockets to be located at strategic locations;
- <u>Ray Lawyer Drive to Pierroz</u> had two conceptual cross-sections a 4-Lane and a 2-Lane concept;
- <u>Pierroz to Cold Springs Road</u> consisted of three (3) concepts a 4-Lane concept, a 2-Lane Concept and the Couplet concept consisting of 2 lanes eastbound on Placerville Drive and 2 lanes westbound on Cold Springs/Pierroz; and finally,
- <u>Cold Springs to US50 Interchange (East)</u> was, in all cases, proposed to be a 2-Lane facility with landscaped medians and left-turn pockets to be located at strategic locations.
- Bike Lanes, Transit Stops, and Landscaped Medians with Left-Turn Pockets were common to <u>all</u> concepts.

The Team and the Stakeholder Advisory Committee prepared a final screening matrix (Exhibit 4-11) that assessed the ability of various cross-section concepts to achieve a set of project goals. As illustrated in Exhibit 4-11, there are two sets of "Goals" directing the *Placerville Multi-Modal Corridor Mobility Study*. The first set of goals relate to the overall goals for the project based on the EDCTC's vision. These include:

- Improve Traffic Safety, Access Management and Operations
- Improve Bicycle, Pedestrian and Transit Access (and Use)
- Support and Encourage "Smart Growth"
- Take into Account Community Desires

The second set of goals reflected the specific desires and vision of the Stakeholder Advisory Committee. These goals included:

- Accommodate Future Traffic/Congestion
- Preserve and Retain Existing Businesses



- Comparative Cost
- "Destination" Amenities
- Improve Hangtown Bridge
- Implementability (Ease)

The matrix then "scores" the various segment roadway concepts based on each concept's ability to achieve the desired goal. The relative "performance" of each concept as concluded by the SAC and the Team is reflected in this assigned score. On the right hand side of the matrix is a summary ranking based on the total score for the various sets of goals.

Based on this scoring effort (and as illustrated in Exhibit 4-11), the outcome of this screening effort was to have a street cross-section for Placerville Drive as follows:

- <u>US50/Forni to Ray Lawyer Drive</u> is widened from the existing 3-lane crosssection to a 4-Lane facility with landscaped medians and left-turn pockets;
- <u>Ray Lawyer Drive to Pierroz</u> is widened from the existing 3-lane cross-section to a 4-Lane facility with landscaped medians and left-turn pockets;
- <u>Pierroz to Cold Springs Road</u> is widened from the existing 3-lane cross-section to a 4-Lane facility with landscaped medians and left-turn pockets;
- <u>Cold Springs to US50 Interchange (East)</u> is a 2-Lane facility with landscaped medians and left-turn pockets to be located at strategic locations.

SAC Recommended Cross-Sections (Initially)

- US50/Forni to Ray Lawyer Drive
 ~ 4 Lanes plus Medians
- Ray Lawyer Drive to Pierroz ~ 4 Lanes plus Medians
- Pierroz to Cold Springs ~ 4 Lanes plus Medians
- Cold Springs to US50 Rebuilt Interchange ~ 2 Lanes plus Medians
- Bike lanes, transit stops and medians with left-turn pockets throughout the corridor
- Bike Lanes, Transit Stops, and Landscaped Medians with Left-Turn Pockets are throughout the corridor.



Exhibit 4-11: Segment Options Screening Matrix

Scores changed by SAC on 9/3/08

Placerville Drive: Segment Optic	ons Sc	reening	Matrix	SAC	FINAL													3-S	ep-08
Project Goals and Segment Description	Improve Traffic Safety	Improve Access Management	Improve Traffic Operations	Improve Bicycle Access and Safety	Improve Pedestrian Access and Safety	Improve Transit Operations and Use	Support and Encourage Smart Growth and Strategic Land use	Open House Input	Accommodate Future Traffic/Congestion	Preserve and Retain Existing Businesses	Comparative Cost	"Destination Amenities	Improve Hangtown Bridge	Implementability	"Score" (Based on Community Design Grant Goals Only)	"Rank" (Based on Community Design Grant Goals Only)	"Score" (Based on Community Design Grant AND SAC Goals)	"Rank" (Based on Community Design Grant AND SAC Goals)	SAC Members "Vote"
	< Community Design Grant Goals> <																		
US50/Forni to Ray Lawyer Drive 4 Lanes + Medians + Left-Turn Pockets (Concepts "A", "B", & "C")	Concepts "A", "B", and "C" Have The Same Cross-Section Concept																		
Ray Lawyer to Pierroz – 4 Lanes + Medians + Left-Turn Pockets and regional connections(Concepts "A" & "C")	2	1	2	2	1	2	1	2	2	1	1	1	2	1	13	1st	21	1st	4
Ray Lawyer to Pierroz – 2 Lanes + Medians + Left-Turn Pockets AND Regional Connections (Concept "B")	2	1	1	2	2	1	1	1	1	2	2	1	2	2	11		21	1st	3
Pierroz to Cold Springs 4 Lanes + Medians + Left-Turn Pockets (Concept "A")	2	1	2	2	1	2	1	2	2	0	1	1	2	1	13	1st	20		5
Pierroz to Cold Springs 2 Lanes + Medians + Left-Turn Pockets (Concept "B")	2	1	1	2	2	1	1	1	1	2	2	1	2	2	11		21	1st	2
Pierroz to Cold Springs COUPLET: 2 Lanes Eastbound on Placerville Drive and 2 Lanes Westbound on Cold Springs/Pierroz (Concept "C")	1	1	1	2	1	1	1	0	1	1	1	1	2	1	8		15		0
Cold Springs to US50 Interchange (East) 2 Lanes + Medians + Left-Turn Pockets (Concepts "A", "B" & "C")			(Concept	s "A", "E	3", and	"C" Have	The Sar	ne Cro	s-Sectio	n Conce	pt							
	2 Strongly Supports the Goal 1 Somewhat Supportive of Goal																		
	0	0 Does Not Support the Goal																	



Selection of the Stakeholder Advisory Committee Recommended Alternative

The Stakeholder Advisory Committee Recommended Alternative as articulated in the following section of this document was then developed through an integration of the land use concepts and the results of the screening previously discussed.

Stakeholder Advisory Committee Meeting #5

At a fifth and final SAC meeting in early October 2008, members of the SAC, the City of Placerville Departments, the consultant preparing the *Placerville Drive Development and Implementation Plan* (land use focus) and the *Placerville Multi-Modal Corridor Mobility Study* Team, concerns were raised regarding the integration of a four-lane concept with medians between Ray Lawyer Drive and Cold Springs Road as identified through the matrix assessment process and illustrated in Exhibit 4-11 by the SAC at the fourth meeting.

The SAC and the Team had selected the 4-lane concept for the entirety of Placerville Drive based on a number of factors including projected travel volumes, community input, implementation of bike lanes and median landscaping to "soften" the streetscape as givens and the consensus decision of the Stakeholder Advisory Committee members.

Concern was expressed by the consultant preparing the land use plan for Placerville Drive that the 4-lane concept (with medians) was less compatible with the land use goal of changing Placerville Drive from its present auto-oriented commercial strip development to a more integrated, mixed use type of development with the "Village Cores" as articulated in the (draft) land use planning concepts. It was noted that the concept of a 2-lane facility (between Ray Lawyer Drive and Cold Springs Road) was more appropriate for a "downscaled, destination-oriented street" as envisioned for the future.

The alternative perspective presented was that the travel forecasting developed by the City of Placerville showed the need for a 4-lane roadway between US 50/Forni/Placerville Drive (west) interchange and Ray Lawyer Drive and between Pierroz and the US50/Downtown Placerville (east) interchange. The travel forecasts showed the demand for a 2-lane facility between these two segments. However, new development proposed for this area was not included in the earlier travel forecasts and, as such, a concern was expressed by some that not providing sufficient capacity for this traffic in the future would be inappropriate and unacceptable.

A "compromise concept" for the segment of Placerville Drive between Ray Lawyer Drive and Cold Springs Road was then developed by the group and endorsed by the Stakeholder Advisory Committee as the "Stakeholder Advisory Committee Recommended Alternative". This recommended alternative consisted of having a roadway in this segment wide enough to accommodate 4 travel lanes, bicycle lanes and landscaped medians with strategically located left-turn pockets, but stripe the roadway in the near term as two wide lanes (one lane in each direction) plus bicycle lanes and restripe the roadway to 4-lanes if and when needed in the future. This is referred to as a "convertible" lane concept.

SAC Recommended Cross-Sections (Compromise Concept)

- US50/Forni to Ray Lawyer Drive
 ~ 4 Lanes plus Medians
- Ray Lawyer Drive to Cold Springs ~ 2 Lanes plus On-Street Parking plus Medians "convertible" to 4 Lanes without On-Street Parking
- Cold Springs to US50 Rebuilt Interchange ~ 2 Lanes plus Medians
- Bike lanes, transit stops and medians with left-turn pockets throughout the corridor



This page left blank intentionally



Chapter 5: The Stakeholder Advisory Committee Recommended Alternative

The Stakeholder Advisory Committee Recommended Alternative was selected by the *Placerville Multi-Modal Corridor Mobility Study* Stakeholders Advisory Committee (SAC) and the Team comprised of the sponsoring agency and the consultants. The Stakeholder Advisory Committee Recommended Alternative is based on a multi-step process of assessing concepts, testing these concepts with the SAC and the public and the refining the concepts, re-testing, etc. Chapter 4 of this document describes the process and Exhibit 5-1 illustrates the process graphically. This chapter discusses the proposed Stakeholder Advisory Committee Recommended Alternative in detail and describes a potential long-term outcome of how Placerville Drive might be re-configured.

The Stakeholder Advisory Committee Recommended Alternative for Placerville Drive as envisioned will reconstruct the existing 3-lane undivided thoroughfare. Key project features

will include: vehicle travel lanes will be reconfigured, and the road cross section changed to reflect different segments of the corridor; sidewalks will be provided; and median planters. decorative paving, historical markers and/or public art and additional lighting are envisioned. This recommended alternative concept has been developed to attract additional private investment in the corridor, consistent with the (draft) land use corridor plans that integrate land use with transportation and change the character of Placerville Drive from a "commuter thoroughfare" to a "destination" in the future.

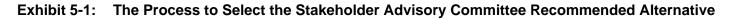
The recommended alternative for Placerville Drive as envisioned is a concept that is multi-modal through the

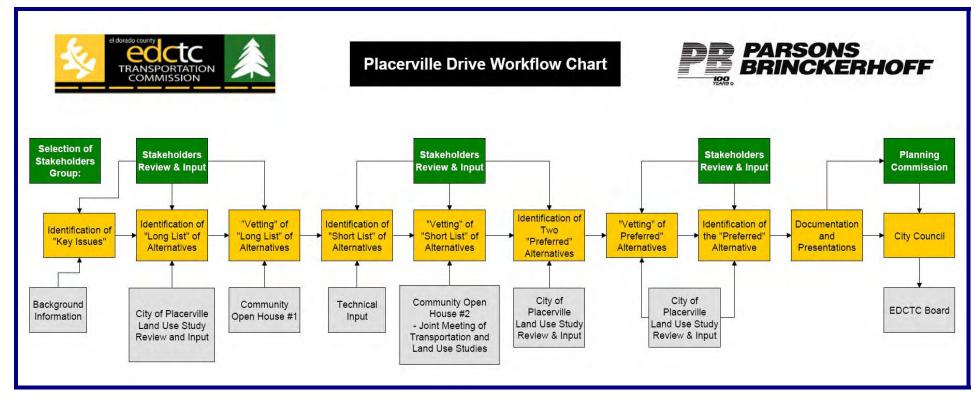
Stakeholder Advisory Committee Recommended Alternative in Concept

- Reconstruct the undivided 3-Lane thoroughfare to a divided roadway with a landscaped median and travel lanes appropriate for the land uses adjacent.
- Improve the attractiveness of the streetscape through landscaping, lighting, public art, etc.
- Transform the corridor to be consistent with transformative land uses under study by the City of Placerville to become more *destination oriented* in nature (as opposed to the current *commuter/through traffic* orientation.

accommodation and enhancement of pedestrians, bicycles and transit – in addition to automobiles and trucks. The concept is responsive to the specifics of the corridor in terms of travel demands. And the concept is responsive to the changing land use vision for Placerville Drive as articulated by the City of Placerville, Community Development Department and as illustrated in Exhibit 4-8.









As illustrated, the proposed concept consists of the following segments and cross-sections:

- From <u>US50/Forni to Ray Lawyer Drive</u>, Placerville Drive will be widened (as necessary) to accommodate an approximate 72-foot cross-section consisting of 4 Lanes (2 Lanes in each direction) with a landscaped median and left-turn pockets. Exhibit 5-2 illustrates the proposed cross-sectional concepts for a future Placerville Drive in "elevation view".
- The cross-section will also accommodate on-street bike lanes and sidewalks for the entire length of this segment.
- Left-turn pockets will be located within the otherwise landscaped median at strategic locations to be determined. Curb-side transit "bulb-outs" will be identified where feasible and/or practical. At key signalized intersections (existing and future), additional right-ofway will/may be required to accommodate the U-Turning movement of "super-trucks" (trucks 70-feet in length). These decisions will be made in concert with the appropriate and affected local agencies and stakeholders.¹

Exhibits 5-3 and 5-4 depict at an example location and a conceptual "visualization" of how the corridor would look after implementation of this cross-sectional concept.



Exhibit 5-2: Placerville Drive US 50/Forni to Ray Lawyer Drive

¹ Determining the location of future left-turn pockets, transit "bulb-outs" and/or additional ROW at key signalized intersections (existing and future) are in-depth efforts that will entail a combination of traffic analysis and affected agencies along with Placerville Drive business and community owners and representatives input. Such an effort is beyond the scope of this initial planning study but is an effort that will occur in the next phases of project development.



Exhibit 5-3: US 50 to Ray Lawyer Drive Looking Northeast



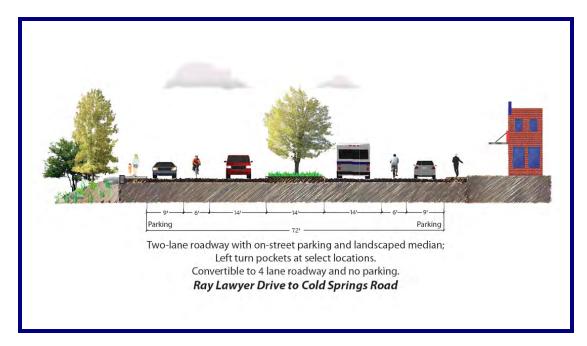


Exhibit 5-4: Visualization with 4 Lanes Plus Median





From <u>Ray Lawyer Drive to Cold Springs Road</u>, Placerville Drive will be widened (as necessary) to accommodate an approximate 72-foot cross-section. This cross-section will be striped to accommodate 2 Lanes (1 Lane in each direction) including on-street parallel parking and a landscaped median with left-turn pockets to be located at "strategic points" to be determined at a later date. The exhibit below illustrates how this cross section would look.



- The cross-section will also accommodate on-street bike lanes and sidewalks for the entire length of this segment.
- Left-turn pockets will be located within the otherwise landscaped median at strategic locations to be determined. Curb-side transit "bulb-outs" will be identified where feasible and/or practical. At key signalized intersections (existing and future), additional right-of-way will/may be required to accommodate the U-Turning movement of "super-trucks" (trucks 70-feet in length). These decisions will be made in concert with the appropriate and affected local agencies and stakeholders.²

Exhibits 5-5 and 5-6 depict an example of an existing location in this segment of Placerville Drive and a conceptual "visualization" of how the corridor would look after the implementation of this cross-section.

Caveats

The Stakeholder Advisory Committee Recommended Alternative was agreed-to with two caveats by the SAC.

² Determining the location of future left-turn pockets, transit "bulb-outs" and/or additional ROW at key signalized intersections (existing and future) are in-depth efforts that will entail a combination of traffic analysis and affected agencies along with Placerville Drive business and community owners and representatives input. Such an effort is beyond the scope of this initial planning study but is an effort that will occur in the next phases of project development.



"Convertible" Concept

The first agreed-to caveat is that this design concept is a "convertible" concept and is proposed to be designed such that it could be re-striped to become a 4-Lane facility with bicycle lanes (no on-street parking) in the future – if the traffic demand warrants such a change. Exhibit 5-8 presents a visualization which illustrates this "converted" 4-lane concept in the future (If necessary).

Regional Traffic Re-Routing

A second caveat associated with the <u>Ray Lawyer Drive to Cold Springs Road</u> segment proposed herein, is that regional traffic will be re-routed away from Placerville Drive to other new facilities under consideration by the City of Placerville. Exhibit 5-7 illustrates potential new regional connectivity alignments that were discussed with the SAC as part of this compromise agreement for this segment of the Placerville Drive.

It is noted that some members of the SAC, the Team and affected agencies expressed the opinion that "new regional connections" were vital for the success of this compromise cross-section concept and that without the regional connections to pull through traffic away from Placerville Drive, forecasts of future traffic suggest a 4-Lane street cross-section will be needed by the year 2025-2030. Thus, this "convertible" street concept was/is a "compromise" concept agreed to by the various involved stakeholders (including Agencies) as an outcome of the *Placerville Multi-Modal Corridor Mobility Study.*

Cold Springs to US50 Interchange (East)

From <u>Cold Springs to US50 Interchange (East)</u>, Placerville Drive will be converted from the 3-lane facility to a 2-Lane facility with landscaped medians and left-turn pockets to be located at strategic locations.³



³ Determining the location of future left-turn pockets and transit "bulb-outs" (if applicable in this segment) are in-depth efforts that will entail a combination of traffic analysis and affected agencies along with Placerville Drive business and community owners and representatives input. Such an effort is beyond the scope of this initial planning study but is an effort that will occur in the next phases of project development.



Exhibit 5-5: Ray Lawyer Drive to Cold Springs Road Looking Southwest







Exhibit 5-6: Visualization with 2 Lanes Plus Parking (Convertible to 4 lanes without parking if necessary)



Exhibit 5-7: Regional Connections Proposed by City of Placerville

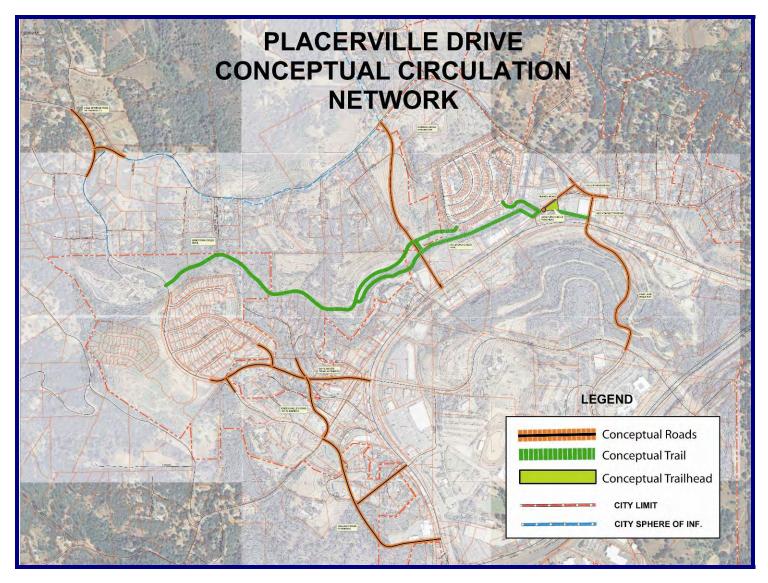




Exhibit 5-8: Ray Lawyer Drive to Cold Springs Road Looking Northeast





Exhibit 5-9: Visualization with 4 Lanes No Parking (Converted from 2 lanes with parking)





Order of Magnitude Costs

Order-of-magnitude costs for implementing the Placerville Drive proposed Stakeholder Advisory Committee Recommended Alternative are presented in Exhibit 5-10 which follows. The estimates are based on work conducted by the City of Placerville for the Traffic Impact Mitigation (TIM) Fee Program, April 2008. These figures are based on a 72-foot curb-tocurb x-section and reconstruction of Placerville Drive along with some modification of the existing roadway centerline to accommodate their proposed design.

Placerville Drive Cos	t Analysis by Location Segmer	nt	
Placerville Drive Segments & Project Development Element (See Note 1)		Estimated Total in \$Million's (\$ 2008)	
US 50/Forni Interchang	le (Fair Lane) to Ray Lawyer Dr	ive	
Preliminary Engineering		\$	0.41
Construction Materials			2.05
Right-of-Way			0.52
Administration			0.18
Total for Segment		\$	3.17
		-	
Ray Lawyer Di	rive to Cold Springs Road		
Preliminary Engineering		\$	1.35
Construction Materials	See Note 2		6.75
Right-of-Way			1.04
Administration			2.56
Total for Segment		\$	10.35
Cold Spr	rings Road to US 50		
Preliminary Engineering		\$	0.84
Construction Materials	See Note 3	\$	2.15
Right-of-Way	See Note 3	\$	-
Administration		\$	0.38
Total for Segment		\$	3.36
TOTAL ALL SEGMENTS (in \$ Million's)		\$	16.88
Votes: I). All cost estimates are from City of Placerville Traffic Impact Mitigation (TIM) Fee Program I April 2008.			е
2). Cost includes \$1M (construction only) for the	e replacement of Hangtown Bridd	e.	
B). Reductions have been made from City estim			
54-foot curb-to-curb vs. the TIM Fee Program Reductions include deletion of retaining wall,	assumption of 72-feet curb-to-c	urb.	

Exhibit 5-10: Order of Magnitude Cost Estimates

Source: Application of City of Placerville TIM Fee Estimates, dated April 2008



This page intentionally left blank



Chapter 6: Conclusions and Next Steps

The *Placerville Drive Multi-Modal Corridor Mobility Study* has been a multi-jurisdictional effort to develop a new transportation vision for Placerville Drive in Placerville, CA. Beginning in the late spring 2008, the effort has taken approximately nine months to complete and was funded through a Caltrans *Community-Based Transportation Planning* grant opportunity. The El Dorado County Transportation Commission (EDCTC) was the lead agency on this effort with support from the City of Placerville Departments of Community Design and Public Works, El Dorado County and El Dorado Transit.

The effort engaged the community in developing a vision for Placerville Drive for the future. Community actions included the following:

- A Stakeholder Advisory Committee (SAC) comprised of members from the Placerville Drive community, as well as the larger Placerville community including members of the Planning Commission. The SAC met five (5) times during the course of this effort with agendas and minutes prepared. The SAC was instrumental in driving the process to a successful outcome.
- Two Open Houses attended by approximately 50 individuals in total. At the first Open House, the "Long List" of concepts was reviewed with the attendees. At the second Open House, a short list of concepts was reviewed and the meeting was held jointly with a separate land use team that is developing a land use vision for Placerville Drive. Questionnaires were handed out at the Open Houses to obtain input from the community. Three key findings were: 1). Placerville Drive was perceived by everyone as a facility with safety and mobility issues in need of changes; 2). "Doing Nothing" was not an option; and 3). Widening Placerville Drive to a six-lane facility with or without additional frontage roads was also not acceptable.
- A set of efforts to coordinate the transportation and land use components of the corridor by working with the land use team for the City of Placerville. Linking the future land use and the future transportation was acceptable to most everyone including the SAC.
- Presentations to the Placerville Planning Commission and City Council, as well as the El Dorado County Transportation Commission Board in December 2008.

The <u>need</u> to make changes to Placerville Drive is to serve the evolving transportation and land use mix along Placerville Drive. The <u>purpose</u> of the <u>Placerville Drive Multi-Modal</u> Corridor Mobility Plan was to balance the need for vehicular access and capacity, while serving and complimenting a future corridor that increases pedestrian/bike/transit opportunities, enhances non-auto-dominant land uses, and improves user safety at every opportunity.

A multi-step screening effort of roadway concepts was undertaken to reach the Stakeholder Advisory Committee Recommended Alternative for further consideration and design engineering and implementation in the future. The screening process began with a "long list" of concepts and was screened to a "short list" of concepts with input from the stakeholders and community. This list, in turn, was then screened to a "very short list" of concepts with input from the stakeholders and the community again. And finally a Recommended Alternative was selected by the SAC and has been presented herein for review and documentation.



The Stakeholder Advisory Committee Recommended Alternative consists of six elements and reflects a vision of changing the nature of the roadway from a three-lane "commuter/through route" to a divided roadway with a landscaped median and travel lanes consistent with the adjacent land uses. This strategy concept as illustrated in Exhibits 6-1 and 6-2 has the elements noted below:

- 1. A strategic concept of enhancing the multi-modal mobility options by providing sidewalks, bicycle lanes and enhanced transit stops throughout the length of the corridor from US50/Forni Road to US50/Placerville Drive-Main Street Connection.
- 2. As illustrated in Exhibit 6-1, a strategic concept of improving the visual appearance of Placerville Drive through the implementation of a landscaped median, sidewalk-side treatments (landscaping, pavement, etc.) and public art and identifying thematic and defining features along the corridor. The types of treatments will be determined in future phases of project development and through the *Placerville Drive Development and Implementation Plan Study* (land use focused) by the Land Use Team under contract to the City of Placerville, Community Development Department.
- 3. A strategy that is not solely focused on "moving cars", but links the re-design of Placerville Drive transportation to future land use and increasing the vehicular safety and (in some segments) capacity with these actions:
 - a. At the US50/Forni Road/Placerville Drive, implementation of the proposed interchange redesign as adopted by the City of Placerville previously.
 - b. Between US50/Forni Road/Placerville Drive interchange to Ray Lawyer Drive, implementation of four-lane (4L) cross-section plus bike lanes and medians as illustrated in Exhibit 6-1.
 - c. Between Ray Lawyer Drive and Cold Springs Road, a wider than required two-lane (2L) cross-section plus bike lanes and medians that is "convertible" to a four-lane (4L) cross-section plus bike lanes and medians if and when the demand warrants as illustrated in Exhibit 6-1.
 - d. Reconstruction of the Hangtown Creek Bridge to a four-lane (4L) crosssection plus bike lanes (and possibly medians) plus sidewalks
 - e. Between Cold Springs Road and the newly improved and extended US50/Main Street interchange, a two-lane (2L) cross-section plus bike lanes and medians as illustrated in Exhibit 6-1.
 - f. At select and appropriate locations to be determined in the next phase of project development, protected left-turn pockets for turns and U-Turns as illustrated in the visualizations in Chapter 5 and "bulb-outs" as illustrated in Exhibit 6-2.
 - g. At the key signalized intersections, widening of the intersection to accommodate the U-Turn movements of "super trucks" (70 feet in length) which are currently permitted for operation on Placerville Drive.





Exhibit 6-1: Proposed Cross-Sections for Placerville Drive





Exhibit 6-2: Example of Pedestrian "Bulb Out" from Portland, Oregon

Exhibit 6-3: Example of a Median Pedestrian Refuge Area





- 4. Pedestrian crossings across Placerville Drive would only occur at signalized locations with pedestrian refuge areas at the sidewalk (i.e. "bulb outs" as illustrated in Exhibit 6-2 on the previous page) and/or at the median as illustrated in Exhibit 6-3 on the previous page. Signalized locations may be at intersections, but may also be at ped-only crossing(s) in locations deemed appropriate in future project development efforts.
- 5. Reconstruction of the Hangtown Creek Bridge to a four-lane (4L) cross-section plus bike lanes (and possibly medians) plus sidewalks that will be striped for two-lanes in the nearer-term.
- 6. And, a land use plan that changes the character of Placerville Drive from a "through/commuter" character to a "destination-oriented" character with the appropriate supporting pedestrian-friendly infrastructure and travel lanes. This change also assumes the implementation of one or more new "regional connections" (such as a relocated Highway 49) to accommodate the existing and future "through/commuter" elsewhere.

Next Steps

Presentations of the concept were made to the City of Placerville Planning Commission and City Council for review and comment, as well as to the El Dorado County Transportation Commission (EDCTC) Board for review, comment and adoption in December 2008. The next steps are as follows:

- 1. Moving forward with the 4-Lane concept for a new Hangtown Bridge by the City of Placerville.
- 2. Moving forward with a regional study focused on Highway 49 bypass and potentially other options for providing alternatives for shifting "through/commuter" traffic off of Placerville Drive over the longer-term.
- 3. Completion of the *Placerville Drive Development and Implementation Plan Study* (land use focused) by the Land Use Team under contract to the City of Placerville, Community Development Department and adoption of that study by the City Council.
- 4. Modification of the City of Placerville General Plan to reflect this proposed change to Placerville Drive.
- 5. Identifying funding and undertaking the next phase of project development for Placerville Drive which would entail:
 - a. Environmental clearance and engineering design development of the Stakeholder Advisory Committee Recommended Alternative concept presented herein;
 - Working with the Placerville Drive Business Community and other stakeholders to develop the left/U-turn median breaks in a systematic fashion;
 - c. Developing adjacent parcel land use access, parking (in select locations) and goods delivery needs as necessary; and
 - d. Developing the appropriate streetscaping, landscaping and public art requirements to enhance the corridor visually and respond to the community's desires and needs.