Project Study Report-Project Development Support (PSR-PDS)

To

Request Programming for Capital Support (Project Approval and Environmental Document Phase)

On Route 9 in Santa Cruz County

Between Henry Cowell State Park

And Pool Drive

APPROVAL RECOMMENDED:

Guy Preston, Project Sponsor, Accepts risks identified in this PSR-PDS and attached risk register

APPROVAL RECOMMENDED:

Scott Eades, District Division Chief, Planning

APPROVAL RECOMMENDED:

Douglas Hessing, Caltrans Project Manager

APPROVED:

Timothy M. Gubbins, District Director

Date



Vicinity Map

This project study report-project development support has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

REGISTERED CIVIL ENGINEER



Table of Contents

1.	INTRODUCTION	5
2.	BACKGROUND	6
3.	PURPOSE AND NEED	7
4.	TRAFFIC ENGINEERING PERFORMANCE ASSESSMENT	8
5.	DEFICIENCIES	12
6.	CORRIDOR AND SYSTEM COORDINATION	19
7.	VIABLE ALTERNATIVES	20
8.	RIGHT-OF-WAY	27
9.	STAKEHOLDER INVOLVEMENT	28
10.	ENVIRONMENTAL COMPLIANCE	28
11.	FUNDING	35
12.	DELIVERY SCHEDULE	
13.	RISKS	42
14.	EXTERNAL AGENCY COORDINATION	42
15.	PROJECT REVIEWS	42
16.	PROJECT PERSONNEL	42
17.	ATTACHMENTS (Number of Pages)	43

1. INTRODUCTION

Project Description:

This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking

Segments:

- 1. Felton: Henry Cowell State Park to Graham Hill Rd, Post Miles (PM) 4.000 to 6.460
- 2. Schools: Graham Hill Rd to Glen Arbor North (N), PM 6.460 to 8.115
- 3. Ben Lomond: Highland Park to Jacobson Lane (Ln), PM 8.492 to 10.062
- 4. Brookdale: Western Drive (Dr) to Irwin Way, PM 11.123 to 12.180
- 5. Boulder Creek: River Street (St) to Bear Creek Road (Rd), PM 12.450 to 13.239
- 6. North of Boulder Creek: Pleasant Way to Pool Dr, PM 15.084 to 15.422

Project Limits	05-Santa Cruz County (SCr)-9-PM 4.00/15.422
Number of Alternatives	One Build and One No-Build Alternative for
	each Segment
Current Capital Outlay	
Support Estimate for PA&ED	
Current Capital Outlay	\$8 million to \$13 million
Construction Cost Range	
Current Capital Outlay Right-	\$4,329,765
of-Way Cost	
Funding Source	To Be Decided (TBD)
Type of Facility	2-4-lane conventional highway
Number of Structures	0
Anticipated Environmental	Varies - Refer to attached Preliminary
Determination or Document	Environmental Analysis Report (PEAR)
Legal Description	In Santa Cruz County, on State Route 9, from
	Henry Cowell State Park to Pool Dr
Project Development Category	3

The intent of this Project Study Report - Project Development Support (PSR-PDS) is to provide a scoping document for the Project Approval and Environmental Document (PA&ED) phase. As such, the remaining capital outlay support, right-of-way, and construction components of the project are preliminary estimates and are not suitable for programming purposes. Either a project report or a supplemental Project Initiation Document (PID) following the format of a Project Study Report (PSR) will serve as the programming document for the remaining components of the project. A project report will serve as approval of the "selected" alternative.

Other approvals required are:

- Approval of Identified Design Exceptions
- Right-of-Way Data Sheets
- Storm Water Reports
- Cooperative Agreement between Santa Cruz County Regional Transportation Commission (SCCRTC) and Caltrans for the PA&ED; Plans, Specifications, and Estimates (PS&E); Right of Way (R/W); and Construction Phases as necessary

2. BACKGROUND

The "2019 Highway 9 San Lorenzo Valley Complete Streets Corridor Plan" (SLVCSCP) was developed funded by a Caltrans Sustainable Communities Planning Grant and Santa Cruz County voter-approved Measure D transportation sales tax revenues. This plan builds on prior studies, plans, and public input regarding transportation facilities in the San Lorenzo Valley (SLV). The SCCRTC staff worked with a team of transportation consultants from Kimley-Horn and TrailPeople to develop the plan. The purpose of this study was to identify top priority Complete Streets projects along the Route 9 Corridor. The full study can be found here: https://sccrtc.org/slvplan

The SCCRTC developed the SLVCSCP through local outreach and community input, focusing on main streets and town centers of communities requiring pedestrian, bicyclist, and motorist accessibility improvements. Bicycle connectivity throughout the corridor will be developed further in future projects where feasible, such as projects 05-1K900 (PM 18.897/27.094) and 05-1K890 (PM 0.046/ 7.5).

This project incorporated recommendations from the SLVCSCP to develop a build alternative for each Segment to be programmed as individual projects. For Segment 1, this project developed a construction cost estimate for the improvements currently included in the scope for project 05-1K890 for Environmental Document and partnering with SCCRTC to fund the construction of these improvements. SCCRTC will use this document to pursue funding to program the construction of these improvements as part of project 05-1K890.

3. PURPOSE AND NEED

Purpose:

- Provide safe mobility for all road users, including bicyclists, pedestrians, transit vehicles, and motor vehicles.
- Improve multimodal operations at State Route (SR) 9 intersections.
- Reduce vehicle speeds on Highway 9.
- Enhance pedestrian and bicycle mobility.
- Improve pedestrian and bicycle connectivity to transit.
- Improve visibility of pedestrians and bicyclists at crosswalks.
- Provide pedestrian and bicycle connections from neighborhoods to schools, parks, and commercial centers.

Purpose for specific segments:

- 1. Felton: Henry Cowell State Park to Graham Hill Rd, PM 4.00 to 6.46
 - Provide pedestrian and bicycle connection from Glengarry, Lakeside, and San Lorenzo avenue (Ave) neighborhoods to Felton.
 - Provide pedestrian and bicycle continuity from existing facility in the Town of Felton to the entrance of Henry Cowell State Park.
 - Provide safe mobility for all users at Graham Hill Rd intersection.
- 2. Schools: Graham Hill Rd to Glen Arbor N, PM 6.46 to 8.115
 - Provide pedestrian and bicycle connections from Felton to SLV Schools Complex.
 - Provide pedestrian and bicycle connection from Glen Arbor neighborhoods to SLV Schools Complex.
 - Improve vehicle and transit circulation at SLV Schools Complex in coordination with the school circulation plan.
- 3. Ben Lomond: Highland Park to Jacobson Ln, PM 8.492 to 10.062
 - Provide pedestrian and bicycle connection from Ben Lomond to Highland Park and nearby lodging.
- 4. Brookdale: Western Dr to Irwin Wy, PM 11.123 to 12.18
 - Provide pedestrian and bicycle connections to bus stops and nearby lodging.
 - Provide safe mobility for all users at Irwin Way intersection.
- 5. Boulder Creek: River St to Bear Creek Rd, PM 12.45 to 13.239
 - Improve visibility of crossing pedestrians.
 - Improve pedestrian and bicycle access.
 - Provide safe mobility for all users at Bear Creek Road intersection.
- 6. North of Boulder Creek: Pleasant Way to Pool Dr, PM 15.084 to 15.422
 - Provide safe mobility for all users to bus stops and Garrahan Park.

Need:

- Currently many of the town centers lack Main Street facilities such as sidewalks and bike lanes.
- Due to constrained right of way, there are very limited opportunities for pedestrians and bicyclists to comfortably navigate along or across SR 9.
- Vehicle traffic is frequently moving at significantly above the posted speed limit, discouraging multimodal use of the corridor.
- Facilities lack Americans with Disabilities Acts (ADA) compliant connectivity to bus stops and other destinations.

Need for specific segments:

- 1. Felton: Henry Cowell State Park to Graham Hill Road, PM 4.0 to 6.46
 - Deficient pedestrian and bicycle facilities along commercial corridor.
 - Deficient pedestrian and bicycle continuity from existing facility in the Town of Felton to the entrance of Henry Cowell State Park.
 - Lack of multimodal accommodation at Graham Hill Road intersections.
- 2. Schools: Graham Hill Road to Glen Arbor N, PM 6.46 to 8.115
 - Deficient pedestrian and bicycle facilities to the SLV Schools Complex entrance along SR 9.
 - Poor circulation to and past the SLV complex.
- 3. Ben Lomond: Highland Park to Jacobson Ln, PM 8.492 to 10.062
 - Deficient pedestrian and bicycle facilities along commercial corridor to Highland Park entrance.
- 4. Brookdale: Western Dr to Pacific St, PM 11.123 to 12.180
 - Lack of pedestrian or bicycle facilities along SR 9 in this segment.
- 5. Boulder Creek: River St to Bear Creek Rd, PM 12.45 to 13.239
 - Deficient pedestrian and bicycle facilities along commercial corridor.
 - Lack of multimodal accommodation at Bear Creek Road intersection.
- 6. North of Boulder Creek: Pleasant Way to Pool Dr, PM 15.084 to 15.422
 - Lack of pedestrian or bicycle facilities along SR 9 in this segment.

4. TRAFFIC ENGINEERING PERFORMANCE ASSESSMENT

This project evaluates the intersections within each segment to provide safe mobility for all road users, including bicyclists, pedestrians, transit vehicles, and motor vehicles. During PA&ED identified intersections with proposed improvements that will alter the existing intersection control will be analyzed to provide appropriate improvement options for review by the Project Development Team (PDT) to include in the Draft Project Report/Draft Environmental Document as viable options.

Existing Characteristics and Conditions

Table 4.1 provides a synopsis of key features within each segment. For most of its length, SR 9 is two-lanes with narrow shoulders. The focus of the Highway San Lorenzo Valley Plan is for the six segments (seg), since Segment 1 is included in the project 05-1K890, this PSR (PDS) focuses on the remaining five segments along SR 9.

Seg	Post	Intersections	Intersection	Cross	Side	Bike	Posted
#	Mile	with SR 9	Control	walk	walk	Lane	Speed
2	6.460	Graham Hill Rd	Signalized with Left Turn (LT) channelization	Yes	Yes	Narrow shoulder on North Bound (NB)	25 miles per hour (MPH) at PM 6.492 NB/SB
2	6.830	San Lorenzo Way	1-Way Stop Control with LT channelization	No	No	Shoulders on both side	35 MPH at PM 6.712 NB
2	7.060	Fall Creek Dr	1-Way Stop Control with LT channelization	No	No	4 foot (ft) shoulder (Shld)	25 MPH at PM 6.993 SB
2	7.195	SLV School	Signalized -left turn channelization	Yes	Yes	4 ft Shld	
2	7.280	SLV School	1-Way Stop Control with LT channelization	Yes	No	4 ft Shld	
2	7.477	Lazy Woods Rd	1-Way Stop Control with LT channelization	Yes	No	4ft Shld	
2	7.526	El Solyo Heights Dr	1-Way Stop Control with LT channelization	No	No	Begin Narrow Shld	
2	7.833	Brackney Rd	1-Way Stop Control	No	No	Narrow Shld	
2	7.844	Glen Lomond Ln	1-Way Stop Control	No	No	Narrow Shld	
2	7.972	Sunnycroft Rd	1-Way Stop Control	No	No	Narrow Shld	35 MPH at PM 7.976 NB/SB
2	8.052	Willowbrook Dr /Locust Ln	2-Way Stop Control with twilight (TWLT) lane	No	No	Narrow Shld	
2	8.089	Coon Heights Rd	1-Way Stop Control	No	No	Narrow Shld	
2	8.115	Glen Arbor Rd / SR 9	Signalized T with LT channelization	Yes	Yes	4ft Shld	
	8.542	Holiday Ln	1-Way Stop Control	No	No	Narrow Shld	
3	8.550	Highlands County Park	1-Way Stop Control	No	No	Narrow Shld	
3	8.816	Shadowbrook Rd	2-Way Stop Control	No	No	Narrow Shld	
3	8.934	Scenic Way	1-Way Stop Control	No	No	Narrow to No Shld	
3	9.097	Woodland Dr	1-Way Stop Control	No	No	Narrow to No Shld	
3	9.160	Greenbank Dr	1-Way Stop Control	No	No	Narrow to No Shld	
3	9.192	Rowardennan Dr	1-Way Stop Control	No	No	Narrow to No. Shld	35 MPH at PM 9 185 SB

Table 4.1

Seg	Post	Intersections	Intersection	Cross Side		Bike	Posted
#	Mile	with SR 9	Control	walk	walk	Lane	Speed
3	9.207	Old County Rd	1-Way Stop Control	No	No	Narrow to No Shld	
3	9.248	Lorenzo Ave	1-Way Stop Control	No	No	Narrow to No Shld	30 MPH at PM 9.274 NB
3	9.284	Miles St	1-Way Stop Control	No	No	Narrow to No Shld	
3	9.301	Grace St	1-Way Stop Control	No	No	Narrow to No Shld	
3	9.301	Hillside Ave	1-Way Stop Control	No	No	Narrow to No Shld	
3	9.380	Upper Glenn Arbor/Mill Street/Brookside Ave	Signalized with left turn channelization	Yes	Yes	Shld	
3	9.402	Love Creek Rd	1-Way Stop Control with TWLT lane	No	No	4' Shld	30 MPH at PM 9.474 NB
3	9.509	Main St	2-Way Stop Control with TWLT lane	Yes	Yes	Shld and Parking	
3	9.588	Fillmore Ave	1-Way Stop Control with TWLT lane	No	No	4' Shld and parking	
3	9.646	Mill St	1-Way Stop Control end TWLT lane	No	No	4' Shld and parking	
3	9.767	Marshall Creek Court (Ct)	1-Way Stop Control	No	No	Narrow to No Shld	30 MPH at PM 9.711 SB
3	9.854	Old County Rd	1-Way Stop Control	No	No	Narrow to No Shld	
3	9.903	Hubbard Gulch Rd	1-Way Stop Control with TWLT- on SR 9	No	No	Narrow to No Shld	30 MPH at PM 9.898 SB
3	9.920	Alba Rd	1-Way Stop Control with TWLT on SR 9	No	No	Narrow to No Shld	
3	9.944	Brown Gables Rd	1-Way Stop Control ends TWLT- on SR 9	No	No	4ft + Shld	30 MPH at PM 9.967 NB/SB
4	11.128	Western Ave	1-Way Stop Control	No	No	Narrow to No Shld	30 MPH at PM 11.088 NB/SB
4	11.171	Larkspur St	1-Way Stop Control	Yes	No	4' Shld	
4	11.254	Alameda Ave	1-Way Stop Control	No	No	Narrow Shld	
	11.329	Entrance to Lodge	Left turn channelization	No	No	Narrow to No Shld	
4	11.340	Cascade Ave	1-Way Stop Control	No	No	Narrow to No Shld	
4	11.408	Clear Creek Rd	1-Way Stop Control	Yes No Tree issue		Narrow to No Shld	30 MPH at PM 11.445 SB
4	11.417	Pacific St	1-Way Stop Control	No	No	Narrow to No Shld	35 MPH at PM 11.460 NB
4	12.002	Irwin Way	1-Way Stop Control Very constrained with trees on both sides	No	No	Narrow to No Shld	35 MPH at PM 11.892 NB/SB
	12.011	Monan Way	1-Way Stop Control Very constrained with trees on both sides	No	No	Narrow to No Shld	25 MPH at PM 12.315 NB
5	12.450	River St	1-Way Stop Control	No	No	Narrow to No Shld	35 MPH at PM 12.353 SB

Seg	Post	Intersections	Intersection	Cross	Side	Bike	Posted
#	Mile	with SR 9	Control	walk	walk	Lane	Speed
5	12.552	Grove St	2-Way Stop Control	No	No	Narrow to	
_						No Shld	
5	12.624	South St	2-Way Stop Control	No	No	Narrow to	25 MPH at PM
_	10 (00					No Shld	12.687 NB
5	12.693	Flat St	2-Way Stop Control	No	No	Narrow to	25 MPH at PM
5	12 765	Manutain St	2 Wess Sterr Constral	V	N.	No Shid	12.690 SB
5	12.705	Mountain St	2-way Stop Control	res	INO	Narrow to	
	12 702					Wider	
	12.792					shoulder and	
						parking	
5	12.870	Lomond St	2-Way Stop Control	Yes	Yes	Shoulder	
-			with LT channelization			and parking	
5	12.923	Forest St	2-Way Stop Control	Yes	Yes	Shoulder	
			with LT channelization			and parking	
5	13.031	SR 236	4-Way Stop Control	Yes	Yes	Shoulder	
						and parking	
5	13.059	Lorenzo St	1-Way Stop Control	Yes	Yes	Shoulder	25 MPH at PM
						and parking	13.068 NB
5	13.086	Middleton Ave	1-Way Stop Control	Yes	Yes	Shoulder	
_	10 101					and parking	
5	13.101	Haven Ln	1-Way Stop Control	Yes	Yes	Shoulder	
5	12 150	W Daula Assa	1 Wess Sterr Constral	V	V	and parking	25 MDU -+ DM
5	15.150	w Park Ave	1-way Stop Control	res	res	and parking	23 MPH at PM 13 277 SP
5	13 238	Bear Creek Rd	1-Way Stop Control very	No	No	4 ft Shoulder	35 MPH at PM
5	15.250	Dear Creek Rd	constrained with trees on	110	110	4 It Shoulder	13.279 NB
			both sides				101279112
6	15.105	Pleasant Way	1-Way Stop Control	No	No	2 ft to No	45 MPH at PM
			Bus Stop then to the north			Shoulder	14.517 NB
			cut and fill retaining walls				
6	15.130	Madrona Rd	1-Way Stop Control	No	No	2 ft to No	25 MPH at PM
						Shoulder	15.031 SB
6	15.207	Sequoia Rd	1-Way Stop Control	No	No	2 ft to No	
		C 1 D 1				Shoulder	
6	15.335	Kings Creek Rd	1-Way Stop Control	No	No	2 ft Shoulder	
		Councheau Deule	I ree close to intersection	N-	N.	2.611.1	
		Garranan Park	Parking at the Roadside	INO	INO	∠ ft shoulder	
6	15 413	Pool Dr	1-Way Ston Control	No	No	2 ft shoulder	
0	13.713	1 001 D1	i way stop control	110	110	2 it shoulder	

Analysis Periods

The analysis will include the typical weekday (Tuesday to Thursday) A.M. and P.M. peak periods which are defined as the morning peak (6:00-9:00 am) and evening peak (3:00-6:00 pm).

Analysis Years

To support the project approval and environmental document process, this analysis will be conducted for the following years: Existing Condition and Opening year.

Analysis Locations

The analysis locations encompass the intersections as shown in the Table 4.2.

Intersection (INT) Identification (ID)#	Intersection Post Mile	Study Intersection
INT-1	6.460	Graham Hill Road
INT-2	7.191	SLV High School
INT-3	7.281	SLV Elementary School
INT-4	8.550	Arboleda Way/Highland Park Entrance
INT-5	9.380	Upper Glen Arbor Rd/Mill St
INT-6	9.592	Fillmore Ave
INT-7	12.002	Irwin Way
INT-8	13.240	Bear Creek Rd
INT-9	15.412	Pool Dr

Table 4.2. Analysis Locations - Intersection Control Evaluation Intersections

The results will be formally documented as part of the Traffic Operation Analysis Report (TOAR). The TOAR would fulfil the project-level analysis of Intersection Control Evaluation (ICE) requirements for PA&ED.

5. DEFICIENCIES

The Transportation Planning Scoping Information Sheet (TPSIS) identified that within the corridor, multimodal infrastructure is limited, some roadway features are not ADA compliant, and communities within the project area are concerned that non-motorized travel is uncomfortable because of high-speed vehicles traveling the highway, blind curves, and lack of shoulder space throughout the corridor. There are no bicycle lanes, but bicyclists are allowed. San Lorenzo Valley High school and lower grade school institutions are combined at a multi-school complex within one location in the project limits. Pedestrians and bicyclists frequently travel on SR 9 alongside motorists to get to and from the school complex, community centers, recreational facilities, and surrounding neighborhoods.

In collaboration with the SLVCSCP and the SCCRTC, the PDT identified the following segments:

- Felton: Henry Cowell State Park to Graham Hill Road, PM 4.0 to 6.46
- Schools: Graham Hill Rd to Glen Arbor N, PM 6.46 to 8.115
- Ben Lomond: Highland Park to Jacobson Ln, PM 8.492 to 10.062
- Brookdale: Western Dr to Irwin Way, PM 11.123 to 12.18
- South Boulder Creek: River St to Bear Creek Rd, PM 12.45 to 13.239
- North of Boulder Creek: Pleasant Way to Pool Dr, PM 15.084 to 15.422

The following deficiencies and lack of multimodal connectivity were identified:

- Deficient pedestrian facilities along corridor
- Deficient bicycle facilities along corridor
- Poor circulation to and past the SLV complex.
- Existing sidewalk does not meet ADA standards
- Narrow shoulders
- Deficient pedestrian crossing
- Deficient parking
- Deficient bus stops
- Deficient left turn channelization

Safety Analysis

The available most recent Traffic Accident Surveillance and Analysis System (TASAS) data (October 1, 2017 to September 30, 2020) were requested from Caltrans District 5 for SR 9 roadway and intersections for post mile sections that cover the 6 Segments: PM 6.46/ 8.115, PM 8.492/ 10.062, PM 11.123/ 12.18, PM 12.45/ 13.239, and PM 15.084/ 15.422. Table 5.1 provides the roadway collision rates and Table 5.8 the intersection collision rates.

Locations with trees too close to the travel lane may require removal, as outlined in the SLV plan; this would provide for increased accessibility and reduce the potential for collisions.

Collisions throughout the corridor are likely the result of turning movements, entering and exiting driveways, and commuter related congestion within a corridor that is mountainous, with regular curves and trees alongside the roadway. Rear-end collisions are likely slow stop collisions, mimicking a main street with multiple driveway scenario. Speeding is also a regular issue throughout the corridor.

Route Segme	nt	Actual R	lates		Average Rates			
Begin PM	End PM	Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total	
4.00	6.459	0.154	1.33	3.64	0.24	0.68	1.61	
6.46	8.164	0.055	0.65	1.80	0.016	0.63	1.60	
8.445	10.108	0.074	0.97	2.34	0.016	0.62	1.59	
11.076	12.184	0.000	1.37	2.80	0.016	0.63	1.60	
12.403	13.285	0.080	1.12	3.53	0.016	0.63	1.60	
15.037	15.469	0.000	0.35	1.27	0.016	0.63	1.60	

Table 5.1 State Route Segment Collision Rates

Segment 1: Henry Cowell State Park to Graham Hill Road, PM 4.0 to 6.46

From Table 5.2 there were total of 71 collisions during the 3-year period. 33.8% or 24 of the collisions were hit object type of collisions. The hit object collisions comprise the majority of the collisions along Segment 1. Furthermore, 25.4% or 18 of the collisions were due to improper turns.

Collision Ty	vpe Distributio	n	Primary Collision Factor Distribution			
No. of Collisions	Percentage	Collision Type	No. of Collisions	Percentage	Primary Collision Factor	
4	5.6 %	Head-On	14	19.7 %	Influence Alcohol	
11	15.5 %	Sideswipe	0	0.0 %	Follow Too Close	
12	16.9 %	Rear End	11	15.5 %	Failure To Yield	
14	19.7 %	Broadside	18	25.4 %	Improper Turn	
24	33.8 %	Hit Object	15	21.1 %	Speeding	
5	7.0 %	Overturn	11	15.5 %	Other Violations	
0	0.0%	Auto-Pedestrian	0	0.0 %	Improper Driving	
1	1.4 %	Other	2	2.8 %	Other Than Driver	
0	0.0 %	Not Stated	0	0.0 %	Unknown	

Table 5.2

Segment 2: Schools: Graham Hill Rd to Glen Arbor N, PM 6.46 to 8.115

From Table 5.3 there were total of 66 collisions during the 3-year period. 47% or 31 of the collisions were rear-end type of collisions. The rear-end collisions comprise the majority of the collisions along the Segment 2. Furthermore, 47% or 31 of the collisions were due to speeding. The 3-year TASAS collision data correlates to the recurring congestion along Segment 2.

Two of the three Auto-Pedestrian type of collision were at intersections, one at Graham Hill and the other at SLV Elementary intersection.

Collision Type Distribution			Primary	[,] Collision Fa	ctor Distribution
No. of Collisions	Percentage	Collision Type	No. of Collisions	Percentage	Primary Collision Factor
1	1.5 %	Head-On	6	9.1 %	Influence Alcohol
11	16.7 %	Sideswipe	1	1.5 %	Follow Too Close
31	47.0 %	Rear End	9	13.6 %	Failure To Yield
7	10.6 %	Broadside	7	10.6 %	Improper Turn
12	18.2 %	Hit Object	31	47.0 %	Speeding
0	0 %	Overturn	9	13.6 %	Other Violations
3	4.5%	Auto-Pedestrian	1	1.5%	Improper Driving
1	1.5 %	Other	2	3.0 %	Other Than Driver
0	0.0 %	Not Stated	0	0.0 %	Unknown
			0	0.0 %	Fell Sleep

Table 5.3

Segment 3. Ben Lomond: Highland Park to Jacobson Ln, PM 8.492 to 10.062

From Table 5.4 there were total of 63 collisions during the 3-year period. Over 39.7% or 25 of the collisions were rear-end type of collisions. The rear-end collisions comprise a majority of the collisions along the corridor. Typically, rear-end collisions are associated with congestion or stop-and-go traffic conditions. Furthermore, 31.7% or 20 of the collisions were due to improper turn and 30.2% or 19 of the collisions were due to speeding. The 3-year TASAS collision data correlates to the recurring congestion along Segment 3.

Collision Type Distribution				Primary	Collision Fa	ctor Distribution
No. of Collisions	Percentage	Collision Type		No. of Collisions	Percentage	Primary Collision Factor
1	1.6 %	Head-On		10	15.9 %	Influence Alcohol
8	12.7 %	Sideswipe		1	1.6 %	Follow Too Close
25	39.7 %	Rear End		7	11.1 %	Failure To Yield
10	15.9 %	Broadside		20	31.7 %	Improper Turn
17	27.0 %	Hit Object		19	30.2 %	Speeding
1	1.6 %	Overturn		5	7.9 %	Other Violations
1	1.6%	Auto-Pedestrian		0	0.0%	Improper Driving
0	0.0 %	Other		0	0.0 %	Other Than Driver
0	0.0 %	Not Stated		1	1.6 %	Unknown
				0	0.0 %	Fell Sleep

Table 5.4

Segment 4: Brookdale: Western Dr to Irwin Way, PM 11.123 to 12.180

From Table 5.5 there were total of 41 collisions during the 3-year period. Over 43.3% or 19 of the collisions were hit object type of collisions. The hit object collisions comprise a majority of the collisions along Segment 3. Furthermore, 41.5% or 17 of the collisions were due to improper turns.

Collision Type Distribution				Primary	v Collision Fa	ctor Distribution
No. of Collisions	Percentage	Collision Type		No. of Collisions	Percentage	Primary Collision Factor
1	2.4 %	Head-On		6	14.6 %	Influence Alcohol
4	9.8 %	Sideswipe		0	0.0 %	Follow Too Close
7	17.1 %	Rear End		5	12.2 %	Failure To Yield
8	19.5 %	Broadside		17	41.5 %	Improper Turn
19	46.3 %	Hit Object		4	9.8 %	Speeding
2	4.9 %	Overturn		4	9.8 %	Other Violations
0	0.0%	Auto-Pedestrian		0	0.0%	Improper Driving
0	0.0 %	Other		2	4.9 %	Other Than Driver
0	0.0 %	Not Stated		3	7.3 %	Unknown
				0	0.0 %	Fell Sleep

Table 5.5

Segment 5: South Boulder Creek: River St to Bear Creek Rd, PM 12.45 to 13.239

From Table 5.6 there were total of 44 collisions during the 3-year period. Over 29.5% or 13 of the collisions were rear-end type of collisions and 22.7% or 10 of the collisions were broadside. The rear-end collisions comprise a majority of the collisions along Segment 5. Furthermore, 31.8% or 14 of the collisions were due to speeding and 22.7% or 10 collisions each for failure to yield and improper turn. The 3-year TASAS collision data correlates to the recurring congestion along Segment 5. Two out of the three Auto-Pedestrian collisions within this Segment were at intersections, one at Big Basin and one at Bear Creek intersection.

Section 5:

Within Segment 5, a fatal auto-ped type collision although included with intersection of SR 9 and Bear Creek Rd, the collision occurred just to the north of W. Park Ave due to a driver driving under the influence (DUI) with a calculated speed of 44 MPH.

Collision Type Distribution			Primary Collision Factor Distribution			
No. of Collisions	Percentage	Collision Type	No. of Collisions	Percentage	Primary Collision Factor	
2	4.5 %	Head-On	2	4.5 %	Influence Alcohol	
7	15.9 %	Sideswipe	0	0.0 %	Follow Too Close	
13	29.5 %	Rear End	10	22.7 %	Failure To Yield	
10	22.7 %	Broadside	10	22.7 %	Improper Turn	
7	15.9 %	Hit Object	14	31.8 %	Speeding	
1	2.3 %	Overturn	3	3.8 %	Other Violations	
3	6.8%	Auto-Pedestrian	0	0.0%	Improper Driving	
1	2.3 %	Other	2	4.5 %	Other Than Driver	
0	0.0 %	Not Stated	3	6.8 %	Unknown	
			0	0.0 %	Fell Sleep	

Table 5.6

Segment 6: North of Boulder Creek: Pleasant Way to Pool Dr, PM 15.084 to 15.422

From Table 5.7 there were total of 11 collisions during the 3-year period. Over 27.3% or 3 of the collisions were rear-end type of collisions. The rear-end collisions comprise a majority of the collisions along Segment 6. Furthermore, 36.4% or 4 of the collisions were due to speeding and 27.3% or 3 of the collisions were due to failure to yield. The 3-year TASAS collision data correlates to the recurring congestion along the corridor.

Table 5.7

Collision Type Distribution			Primary Collision Factor Distribution		
No. of Collisions	Percentage	Collision Type	No. of Collisions	Percentage	Primary Collision Factor
1	9.1 %	Head-On	1	9.1 %	Influence Alcohol
2	18.2 %	Sideswipe	0	0.0 %	Follow Too Close
3	27.3 %	Rear End	3	27.3 %	Failure To Yield
2	18.2 %	Broadside	2	18.2 %	Improper Turn
2	18.2 %	Hit Object	4	36.4 %	Speeding
1	9.1 %	Overturn	0	0.0 %	Other Violations
0	0.0 %	Auto-Pedestrian	0	0.0 %	Improper Driving
0	0.0 %	Other	0	0.0 %	Other Than Driver
0	0.0 %	Not Stated	1	9.1 %	Unknown
			0	0.0 %	Fell Sleep

Table 5.8 highlights the intersections that exceeded the statewide average total collision rate for similar facilities.

		Actua	Rates	-	Average Rates		
РМ	Intersection	Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total
6.460	Graham Hill Road	0.033	0.07	0.23	0.002	0.16	0.42
7.191	SLV High School	0.000	0.04	0.08	0.001	0.11	0.29
7.281	SLV Elementary School	0.000	0.04	0.17	0.002	0.07	0.17
7.531	El Solyd Heights Dr	0.000	0.23	0.28	0.002	0.07	0.17
8.051	Willowbrook Drive Locust	0.000	0.00	0.19	0.001	0.07	0.16
8.115	Lower Glen Arbor Rd	0.000	0.10	0.38	0.001	0.11	0.29
8.550	Arboleda Way/Highland BL	0.062	0.19	0.31	0.001	0.07	0.16
9.380	Upper Glen Arbor Rd/Mill St (includes Love Creek Rd)	0.000	0.05	0.48	0.002	0.16	0.42
9.510	Main St	0.000	0.24	0.49	0.004	0.10	0.24
9.592	Fillmore Ave	0.000	0.00	0.00	0.002	0.07	0.17
9.651	Mill St	0.000	0.12	0.42	0.002	0.07	0.17
9.901	Hubbard Gulch Rd	0.000	0.00	0.00	0.002	0.07	0.17
9.921	Alba Rd	0.000	0.00	0.00	0.002	0.07	0.17
9.942	Brown Gables Rd	0.000	0.00	0.00	0.001	0.06	0.14
12.002	Irwin Way	0.000	0.24	0.40	0.002	0.07	0.17
12.870	Lomond St	0.000	0.08	0.15	0.004	0.10	0.24
12.920	Forest St	0.000	0.08	0.39	0.004	0.10	0.24
13.037	Big Basin Way/SR 236	0.000	0.04	0.13	0.002	0.07	0.17
13.240	Bear Creek Rd	0.060	0.12	0.54	0.002	0.07	0.17
15.340	Kings Creek Rd	0.000	0.12	0.39	0.002	0.07	0.17
15.412	Pool Dr	0.000	0.13	0.40	0.002	0.07	0.17

Table 5.8. Intersection Collision Rates (9/30/2017-10/01/2020)

6. CORRIDOR AND SYSTEM COORDINATION

Route 9 is a conventional highway connecting the city of Santa Cruz to the San Lorenzo Valley. SR 9 serves the communities of Felton, Ben Lomond, Brookdale and Boulder Creek. SR 9 continues into Santa Cruz County to serve the communities of the San Lorenzo Valley. Within the project limits, Route 9 connects the communities of Felton, Ben Lomond, Brookdale, and Boulder Creek in Santa Cruz County. The project consists of 6 Segments on Route 9, from Henry Cowell State Park to Graham Hill Rd and from Graham Hill Rd to Glen Arbor N in Felton, from Highland Park to Jacobson Lane in Ben Lomond, from Western Drive to Irwin Way in Brookdale, from River St to Bear Creek Rd in Boulder Creek and from Pleasant Way to Pool Drive north of Boulder Creek.

Route 9 within the project limits is classified as a 2- to 4-lane conventional highway. The travelled way width ranges from 24 feet to 48 feet and shoulders vary from 2 feet to 8 feet wide. These historic mountainous communities see heavy truck traffic and high levels of congestion with a strong influx of summer tourism in connection with the nearby Big Basin Redwoods State Park.

The Transportation Concept Report (TCR) for Route 9 recommends improving the route for all modes. The future concept of the corridor is to maintain the existing functional role and purpose and maximize mobility for local interregional travelers. The Transportation Planning Scoping Information Sheet (TPSIS) attached provides a clear direction of the community needs and has also guided the improvements included in the various segments.

Route 9 is of regional importance connecting rural communities. The SLVCSCP highlighted the needs of the communities and overall connectivity needs for all modes. The communities within the project limits have been involved in the development of this project and the SLVCSCP to review and provide comments on the proposed improvements developed from the plan. The multi modal needs are consistent within each segment and the team strives to incorporate these in the proposed improvements.

The following projects have been identified within or adjacent to the project limits:

- Felton Pedestrian Safety Improvements, EA 05-1M400 SR 9 PM 6.30/7.20
- Felton Capital Preventive Maintenance (CAPM), EA 05-1K890, SR 9 PM 0.049/7.5
- SR 9 CAPM, EA-1K900, SR 9 PM 18.897/27.094

7. ALTERNATIVES

Alternative 1–

This alternative proposes to improve Complete Streets elements along SR 9, concentrating on the communities within the project limits by bringing existing sidewalk up to ADA standards, installing new sidewalk, widening shoulders, installing trails, adding Class II bike lanes and Class III bike routes, improving parking, improving bus stops, constructing left turn channelization, and updating crosswalks. Pedestrian facilities can be improved by including streetscape elements such as benches, bike racks, trash/recycle receptacles, planting street trees, and lighting to further promote livability. When feasible, widened shoulders, sidewalks, or trails to specific destinations in the outskirts of the communities, such as Highland and Garrahan Parks, will be scoped. Accommodating a wider shoulder throughout the project limits was not feasible, transportation partners will continue to look for opportunities to widen the shoulder along SR 9.

The PDT developed 6 segments with each segment proposing the following improvements:

Felton- Segment 1:

Henry Cowell State Park to Graham Hill Road, PM 4.0 to 6.46

This segment concentrates on multimodal travel circulation along SR 9 in the community of Felton, starting south of entrance to Henry Cowell Redwood Park up to Graham Hill Road. Caltrans programmed project 05-1K890, the Felton CAPM, for the 2022 State Highway Operation and Protection Program (SHOPP), incorporated improvements (Complete Streets Opportunities: a - h) identified in the SR 9 SLV plan to be part of the next phase to achieve Project Approval and Environmental Document (PA&ED).

Therefore, Segment 1 is not included in Section 10. Environmental Compliance of this document. Specific improvements, such as, intersection improvements between Redwood Dr. and Graham Hill Rd., plus new sidewalk from Laurel Dr. to Kirby St. and Class 2 Bike Lanes within the City of Felton (Complete Street Opportunities: a and b) are included in the Felton CAPM project for construction. The remaining identified improvements (Complete Streets Opportunities: c-g) would be programmed for construction in the Felton CAPM as funding is attained by transportation partners through this document.

Complete Streets Opportunities

- a. Graham Hill Road intersection right turn channelization and pork chop island.
- b. Proposed new sidewalk between Laurel Dr. (PM 5.98) to Kirby Street (St).
- c. Class 2 Bike Lanes between SLV School Campus and Graham Hill Rd.
- d. Bike Boxes at Graham Hill Rd.
- e. Two-way center turn lane between Graham Hill Rd. and Hihn St.

- f. Multi use path/ widened shoulder 4-5' with 3' hinge point, between Oak Avenue (PM 5.73) to Laurel Dr.
 - i. Includes improvements at the Henry Cowell entrance and intersection with Redwood Drive improvements at PM 5.78. Sidewalk with curb ramp would be placed on the northern side of Big Trees Park Road for access to the existing crosswalk.
 - ii. Drainage system at PM 5.78 will require a viaduct on both sides of SR 9 to accommodate the multi-use path and the guardrail. The sidehill viaduct design does not impact the existing culverts, therefor would not require fish passage remediation. The risk of possible fish barrier remediation is included in the risk register.
 - iii. Tree removal and 4-6ft tall retaining wall along the right-of-way line.
- g. Multi-use path/ widened shoulder 4-5' with 3' hinge point, from San Lorenzo Avenue to Oak Avenue
 - Viaduct would be constructed to accommodate the multiuse path and guardrail at PM 5.55. The sidehill viaduct design does not impact the existing culverts, therefor would not require fish passage remediation. The risk of a possible fish barrier remediation is included in the risk register.
 - ii. Tree removal
- h. Multi-use path, widened shoulder 4-5' with 3' hinge point, from Lakeview Drive to San Lorenzo Avenue
 - i. Tree removal and grading
- i. Paved pull out areas
 - i. PM 2.78, 2.97, 3.55, 4.35, 4.62, 5.45
 - ii. PM 3.292 and remove tree
- j. Pave parking area and incorporate multi-use path, widened shoulder 4-5' with 3' hinge point, at the southern Henry Cowell State Park Entrance and trailheads
 - i. PM 4.67
 - ii. PM 2.68

During PA&ED for 1K890, the PDT will review proposed new crosswalks identified by the SLV Plan which require additional approval to be included in the project. With an executed Maintenance Agreement, other complete streets elements such as tree wells will also be reviewed and added when feasible. Also, the curb ramp improvements on the northwest corner of Graham Hill Rd. and SR 9 would need to accommodate the future sidewalk with the PDT reviewing the overall pedestrian circulation and access to the transit stops.

Schools- Segment 2:

This segment concentrates on multimodal travel circulation along SR 9 from Graham Hill Road up to north of the SLV School complex. The main impact to this segment is the SLV school campus traffic congestion relative to SR 9. The SR 9 SLV plan includes two school circulation options.

This segment includes the short-term option. The proposed sidewalk along SR 9 will require retraining wall and tree removal to connect the SVL Highschool and Elementary School entrances. The change in elevation between the parking lot and SR-9 will require a retaining wall.

Since the SR 9 SLV plan was completed, the school district continues to review and analyze possible solutions to their transportation circulation. SCCRTC is partnering with the school district to fund a traffic analysis that would best incorporate the various modes within a very constrained roadway environment. During the next phase, the PDT will review any new options from locally pursued traffic studies and incorporate these school circulation plan proposals. The traffic study for this project will recommend an alternative that best meets the purpose and need (including any options received from other studies), while also addressing school and community concerns. As this segment enters the next phase of coordination with the school, the project will include any additional circulation solutions identified by the traffic analysis. Depending on the impact of the proposed long-term solution, the PDT will review the short-term solution to minimize throwaway or look at a staging solution that accomplishes the long-term solution as funding becomes available.

Other current Caltrans projects within the vicinity of the school complex, including 05-1M400 and 05-1K890, address community identified needs, opportunities, and incorporate improvements that benefit all transportation users along SR 9. During PA&ED, the Felton CAPM (05-1K890) will further consider any proposed striping improvements along SR 9 due to the San Lorenzo school concept under development.

North of the school campus up to Sunnycroft Road, SR 9 traverses very constrained areas including two narrow bridges (PM 7.88 and PM 7.97) with sidewalks on both sides. Between El Solyo Heights Drive to Glen Lomond Lane along southbound SR 9 and between Lazy Woods Road to Brackney Road along the northbound SR 9, minimum widening to accommodate 5-foot shoulder on both sides requires tree removal and small retaining walls. Adding a connection to SR 9 from the El Solyo Heights neighborhood to the west of SR 9 is not feasible. During PA&ED this area can be further studied when surveys are available.

Existing SR 9 widens to include a left turn lane from Sunnycroft Road up to the signal at Glenn Arbor Road. This segment proposes to extend sidewalk along the southbound side to connect pedestrians to the Glen Arbor signal and only at specific areas along the northbound side to connect pedestrians to shops.

SR 9 beyond Glenn Arbor travels along very constrained areas and minimal widening is not feasible.

Segment 2 Intersections of Interest:

- 6.460 Graham Hill Rd / SR 9
- 7.195 SLV School/ SR 9
- 7.280 SLV School/ SR 9
- 7.526 El Solyo Heights Dr / SR 9
- 8.052 Willowbrook Dr / SR 9
- 8.115 Glen Arbor Rd / SR 9

Graham]	Hill Rd to	Glen Arbor N	, PM 6.46 to	8.115
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Trail (Shoulder with 4 ft decomposed granite (DG))	2320 liner foot (LF)
Class III bike route (4ft shoulder)	6290 LF
Sidewalk (4'to 10')	1770 LF
Enhanced Crosswalks	15 each (EA)
Widened Shoulders (up to 5 feet)	2480 LF
Bus Stop Improvements	4 EA
Right Turn Pockets	1 EA
Retaining Wall	360 LF, 4 foot (FT) tall

Segment 3: Ben Lomond-

Highland Park to Jacobson Ln, PM 8.492 to 10.062

This segment captures Highland Park and connects to the community of Ben Lomond

The project includes improvements to the entrance of Highland Park with the possible addition of a left-turn lane into the Park. Also adding 5-foot shoulders on both sides with up to a 4-foot trail where feasible along the northbound side connecting to the bus stop. Adding wider shoulders, a trail and a standard left turn at this location would include major tree removal. During PAED traffic analysis at this location will be able to better recommend the need for a left turn channelization and other possible solutions at this location. A proposed widened 5-foot shoulder along the southbound side would connect to the bus stop north of the park entrance.

Just past Shadowbrook Road/Park Way Drive intersection with SR 9 to north of Woodland Drive, from PM 8.84 to PM 9.134, SR 9 again traverses a very constrained area with little feasibility to widen the shoulders.

From Woodland Drive to Marshall Creek Court, 5 ft shoulders on both sides and sidewalks where feasible especially between PM 8.365 and PM 8.760. The intersection north of Glen Arbor Road/Mill Street with SR 9 is proposed to be realigned to provide better connectivity to the fire-station and avoid impacting a tree of historical importance. There is a bridge at PM 9.686.

After the bridge at PM 9.686, SR 9 transitions to a wider area with opportunity to include a 4ft sidewalk up to Brown Gables Road, and a Class III bike route to Jacobson Lane.

After PM 10.224, SR 9 is constrained.

Segment 3, Intersections of Interest:

- 8.550 Highlands County Park / SR 9
- 9.380 Brookside Ave / SR 9
- 9.402 Love Creek Rd / SR 9
- 9.509 Main St / SR 9
- 9.588 Fillmore Ave / SR 9
- 9.646 Mill St / SR 9
- 9.903 Hubbard Gulch Rd / SR 9
- 9.920 Alba Rd / SR 9
- 9.944 Brown Gables Rd / SR 9

Table 3.1 - Segment 3: Ben Lomond-Highland Park to Jacobson Ln, PM 8.492 to 10.062

Trail	2005 LF
Class II bike lane	2320 LF
Class III bike route	5470 LF
Sidewalk	5330 LF
Crosswalks	28 EA
Widened Shoulders	3840 LF
Bus Stop Improvements	4 EA
Left Turn Channelization	2 EA
Improved Parking	1540 LF

Brookdale- Segment 4:

Western Dr to Irwin Way, PM 11.123 to 12.18

This segment captures Brookdale Lodge (PM 11.312) and concentrates on connecting the community of Brookdale to the US Post Office. Removing the tree at the existing crosswalk near Clear Creek (PM 11.407) will provide better sight distance. By the Brookdale Lodge, this project proposes to widen shoulders, add trails where feasible, coordinate with the lodge to provide sidewalk along the south bound side, and improve the existing crosswalk at Larkspur Street with sidewalk. Adding or updating sidewalk where feasible from Western Ave. (PM 11.133) to Pacific St. (PM 11.414). During the next phase this section will require much coordination.

Within this segment, before and after Brookdale, SR 9 traverses very constrained areas. For this reason, the project proposes 5-foot shoulders and widening for trails where feasible.

This project also reviewed improvements at Irwin Way (PM 12.002) with minimal widening being feasible at this location. Adding a standard left turn at this location would include major tree removal and a retaining wall, therefore at this time only local widening at Irwin Way is proposed. During PAED traffic analysis at this location will be able to better recommend possible solutions at this location.

western Di to nwin wa	ly, FM 11.125 to 12.1
Trail	170 LF
Sidewalk	2335 LF
Crosswalks	9 EA
Widened Shoulders	920 LF
Bus Stop Improvements	2 EA
Left Turn Channelization	1 EA
Retaining Wall	680 LF, 10-12FT tall

Segment 4: Intersections of Interest: 12.002 Irwin Way / SR 9

Western Dr to Irwin Way, PM 11.123 to 12.18

Segment 5: South Boulder Creek

River St to Bear Creek Rd, PM 12.45 to 13.239

This segment focusses on Boulder Creek, starting at River Street. Entering this area, SR 9 opens up to the community, leaving a very windy constrained area behind. The project proposes a 5-foot shoulder and sidewalk on both sides, enhancing existing crosswalks at Lomond Street, Forest Street, and SR 236. Median islands are included within the existing continuous left turn lane. Posted Speed Limits are 25 and 35 mph. SR 9 crosses a narrow bridge with sidewalk on both sides, then changes abruptly when it passes Bear Creek Road. This project proposes local widening at this location to better accommodate all modes of transport. Adding a standard left turn at this location would include major tree removal, therefore at this time only local widening at Bear Creek Rd is proposed. During PAED traffic analysis at this location will be able to better recommend possible solutions at this location.

This segment provides parallel parking alongside several sidewalk sections, curb extensions will provide a refuge for pedestrians and improve pedestrian visibility to drivers.

South of Flat Street, SR 9 is continuing with very constrained areas.

Segment 5, Intersections of Interest 13.239 Bear Creek Rd / SR 9

South Boulder Creek- Segment 5: River St to Bear Creek Rd, PM 12.45 to 13.239

Class II bike lane	2750 LF
Class III bike route	7450 LF
Sidewalk	4430 LF
Crosswalks	22 EA
Widened Shoulders	2640 LF
Left Turn Channelization	1 EA
Improved Parking	1970 LF
Bus Stop Improvements	3 EA

Segment 6: North of Boulder Creek

Pleasant Way to Pool Dr, PM 15.084 to 15.422

This segment starts at Pleasant Way at the existing bus stop and then proposes to widen shoulders just north of Sequoia Road to 5-foot on both sides, add sidewalk along the Garrahan Park, and enhance the existing crosswalk with sidewalk on the northbound side. Sidewalk continues along the southbound side to connect the Garrahan Park with the community to the north. Adding a crosswalk at Pool Drive will require extensive right of way and tree removal to improve sight distance for traffic traveling south along SR 9. During PAED traffic analysis at this location will be able to better recommend possible solutions at this location.

Pleasant Way to Pool D	or, PM 15.084 to 15.	422
Class III bike route	3140 LF	
Sidewalk	1540 LF	
Crosswalks	5 EA	
Widened Shoulders	2710 LF	
Bus Stop Improvements	1 EA	
Driveway Improvement	1 EA	

North of Boulder Creek- Segment 6:

Design Standard Risk Assessment Matrix

	Design Standards Risk Assessment							
Alternative	Design Standard from Highway Design Manual Tables 82.1A & 82.1B	Probability of Nonstandard Design Feature Approval (None, Low, Medium, High,)	Justification for Probability Rating					
1	Topic 302.1 Width	High	This project will widen shoulders where feasible, however sections alongside cliffs or near heavy vegetation have limited widening through certain sections.					

Highway Planting and Irrigation:

A mix of native vegetation and ornamental landscape planting including trees, shrubs and groundcovers exists throughout the project corridor limits. Several areas within the project limits have existing irrigation facilities that consist of an automated irrigation system including connection to a municipal water source, irrigation crossovers, backflow preventer, irrigation controller, and bubblers. The existing irrigation facilities primarily occur in Ben Lomond from PM 9.4 to PM 9.7

It is anticipated that replacement planting and one-year plant establishment period will be

required due to visual and biological impacts associated with the removal of native trees and vegetation impacted by construction. Replacement planting will include riparian and mixed evergreen habitat. Final scope and locations of work will be refined in coordination with the project biologist when the Natural Environment Study is completed and commitments to the various regulatory agencies are resolved.

Plants will be watered manually for one year using a temporary irrigation system supplied by a water tanker truck.

Erosion Control:

Disturbed areas will be treated with permanent erosion control. Erosion control materials will be selected to best address the various conditions within the project site.

For minimally disturbed areas or disturbed areas adjacent to urban conditions, erosion control materials may only require hydroseed and/or mulch. For disturbed areas that are steep and exposed to concentrated flows, erosion control may require aggressive erosion control techniques such as bioengineering at creek banks, netting, fiber rolls, compost berms and socks, and hydroseed to control erosion and establish vegetation for long term protection.

Aesthetic Treatments:

Aesthetic treatment will be integrated into the design to be consistent with the visual impact analysis and recommendations, with specific types of aesthetic treatments being developed during the project design phase.

8. RIGHT-OF-WAY

Each Segment requires Temporary Construction Easements and some also require Permanent Right of Way to accommodate all the improvements. During PA&ED surveys will provide right of way information to establish the needed permanent and temporary construction easements.

Utilities:

All segments require utility pole relocation, with an estimated total of 92 Utility Poles requiring relocation within the project limits.

Railroad:

There is no railroad involvement.

9. STAKEHOLDER INVOLVEMENT

During the development of this PSR-PDS a community outreach meeting was conducted. One of the concerns was reaching a consistent shoulder width along SR 9 for bicycle access.

SCCRTC continues ongoing discussion and presentations at their Technical Advisory Committee (TAC) meetings to update the community of the progress since the completion of the SLV plan.

As each segment moves into the next phase, more stakeholder involvement is anticipated to capture the concerns of each community. Coordination with the SLV school as well as the Brookdale Lodge and the Fire Stations in Felton, Ben Lomond, and Boulder Creek are some of the aspects that make each segment require stakeholder and community involvement.

10. ENVIRONMENTAL COMPLIANCE

In order to identify environmental issues, constraints, costs, and resource needs, a Preliminary Environmental Scoping (PEAR) was prepared for the project. Potential disposal, staging, and borrow sites will need to be identified in the PA&ED phase for complete environmental review. Field studies were not conducted, and technical studies have been deferred to the PA&ED phase.

General Environmental Considerations (applicable to all segments)

Visual Quality

Highway 9 within the project limits is eligible for scenic highway designation. Therefore, caution should be exercised with any activity or change that could threatened its eligibility. The proposed work will widen the highway corridor and add urbanizing elements in otherwise rural areas, removing mature trees and thick vegetation and clearing more of the forest canopy. Furthermore, because trees are growing close together, it might not be possible to remove only the one(s) within the area of disturbance without damaging the root systems of the adjacent trees, therefore tree removal could be higher than anticipated without avoidance measures. These impacts could be considered potentially significant on any of the segments, some more so than others. Mitigation and enhancements to minimize impacts would support the purpose of the project(s) by helping to create a more pedestrian- and bicycle-friendly environment.

Biology

There is potential for the presence of protected species and critical habitat within the areas of disturbance; surveys will require 10-12 months. However, most project impacts will occur on previously developed or disturbed areas adjacent to the highway, so federally and state listed species are not expected to be encountered. If permits to enter are required, a request should be submitted to R/W at least 2 months in advance in order to obtain them by the required date.

The project includes removal of mature redwoods. Santa Cruz County Code 16.34.010 identifies the objective to preserve significant trees and forest communities on public and private properties. Trees that must be removed would be evaluated to determine whether they were significant trees as defined by the code. Tree removal should be minimized and scheduled outside of nesting season if possible.

Cultural Resources

Properties over 50 years old that could be impacted by the project (this includes work adjacent to the properties) will have to be evaluated for eligibility in the National Register. The risk of adverse impacts to eligible properties is low, however the required studies and document preparation is expected to take 12 months. This will likely be critical path for all segments unless a screened undertaking is deemed appropriate.

Air quality

The project is within the North Central Coast air basin and is in attainment for all federal levels of air quality pollutants, but non-attainment/transitional for the state level for ozone and non-attainment for the state level for PM10. Special consideration might be necessary during construction to reduce emissions and dust. No conformity requirements apply to any segment.

Construction

If traffic detours are required, they must be reviewed by Environmental staff to determine if there are any associated impacts. Construction should be timed to have as little impact on traffic as possible. The timing of construction should also consider impacts on local businesses when in urban areas due to detours, congestion, noise, and/or reduced parking. This could mean performing work at night when the commercial centers are closed, and traffic volumes are low. Night work near residences should be avoided, however. Temporary construction noise, even when in compliance with Caltrans' nighttime noise levels, does not preclude significant impacts from noise.

Cumulative impacts

Impacts could be determined to be less than significant for any individual segment, however consideration must be given to the impacts that have occurred to the overall corridor over time, particularly in the areas of visual quality and community character, to which these projects will contribute. Taken as a whole, the changes to the Highway 9 corridor could be considered cumulatively significant, which would require an EIR for one or more segments.

Anticipated Environmental Commitments (applicable to all segments)

- Contractor will be limited to the minimum area necessary at each location.
 Environmentally Sensitive Area (ESA)s will be established outside of these areas.
- The construction schedule shall be well publicized in advance, particularly to residences and businesses most likely affected by construction activities.
- Prior to removal, trees must be evaluated to determine whether they are significant trees as defined by Santa Cruz County Code 16.34.010. Significant trees that are removed shall be replanted at a ratio appropriate for impacts to habitat.
- Tree removal should be scheduled to occur between September 1 and February 15. Tree replacement would be at a minimum of 3:1. The project will also include erosion control, irrigation, and a one-year plant establishment period. Additional locations could be required for replanting.
- Hand excavation will be required where necessary to reduce impacts to root systems.
- Disturbed areas will be graded to a natural appearance and revegetated; erosion control applied where appropriate.
- Aesthetic elements and/or treatments will be included to reduce the appearance of highway and/or urbanizing features and to improve the user experience. These elements might include benches, improved bus stops, bike racks, decorative lighting, art installments, surface treatments, etc. Guardrail and other metal components will be treated to reduce glare.

Segment 2

The anticipated environmental documentation is a Categorical Exemption under California Environmental Quality Act (CEQA) and a Categorical Exclusion under National Environmental Policy Act (NEPA); this would take approximately 14 months to complete. Programming for a Categorical Exclusion (CE)/CE poses a moderate risk to the schedule; an Initial Study could be deemed appropriate at PA&ED, mostly due to the urbanization through hardscape and tree and vegetation removal. Attention must be given to the changes to the character of the corridor resulting from the improvements. At the northern and southern ends of the segment, greater clearing and additional sidewalks would not be out of place in the suburban setting, however this impact could be considered potentially significant in the middle, rural section of the segment. Modifying the project to avoid the impacts altogether or minimizing them with enhancement measures is recommended.

- This determination was based on the following assumptions:
- All work will be conducted from the roadway.
- There are no potentially significant impacts.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Special Considerations

Visual Quality

From approximately PM 7.65/PM 7.97, work involves substantial widening for sidewalk, curb, and gutter through an otherwise undeveloped stretch of forested highway. In some locations, cutting into an existing, heavily vegetated cut slope would be required. The clearing for this widening, in addition to the hardscape and urban elements, could be considered a potentially significant impact. Consideration should be given to the old highway alignment in the vicinity of PM 7.59 for revitalization and reforesting.

Segment 3

The proposed design does not fully meet the defined purpose due to a gap in the pedestrian facility; this could necessitate design changes at PA&ED. For the purposes of preliminary review, the anticipated environmental documentation would be a Categorical Exemption under CEQA and a Categorical Exclusion under NEPA; this would take approximately 14 months to complete. Programming for a CE/CE poses a moderate risk to the schedule; an Initial Study could be deemed appropriate at PA&ED, mostly due to tree and vegetation removal. Avoiding the impacts altogether and/or minimizing them with enhancement measures is recommended.

This determination was based on the following assumptions:

- All work will be conducted from the roadway.
- There are no potentially significant impacts.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Special Considerations

Visual Quality

Cutting into an existing, heavily vegetated cut slope would be required north of Highland Park, along with other vegetation removal, and could be considered a potentially significant impact. The change to the corridor character should be particularly considered between the north end of Ben Lomond and the San Lorenzo River, where there will be added sidewalk, curb, and gutter and loss of mature trees. Consideration should be given to the old highway alignment in the vicinity of PM 8.5 for revitalization and reforesting.

Need and purpose

The absence of a pedestrian facility between the San Lorenzo River and Marshall Creek weakens the stated need and purpose for this segment.

Segment 4

The proposed design does not clearly meet the defined need and purpose nor necessarily have logical termini, therefore design changes at PA&ED can be expected. For the purposes of preliminary review, the anticipated environmental documentation would be an Initial Study with Mitigation under CEQA and a Categorical Exclusion under NEPA. The work proposed at Irwin Way does not fall into a CE category under CEQA. Furthermore, it would result in potentially significant impacts from urbanization due to a wider expanse of pavement, loss of scenic resources, and substantial loss of mature trees and heavy vegetation. Depending on the extent of R/W at Irwin Way, the project could take large quantities of private property, but regardless would eliminate a considerable amount of roadside parking that could be necessary for residents, considering the steep landform. Alternatives to reduce these impacts must be considered. The document can be expected to take up to 24 months to complete.

There is a low-to-moderate risk that an Environmental Impact Report (EIR) could be required if it appears adequate mitigation cannot be incorporated or if cumulative impacts are determined to be significant. Revising the document type to an EIR from an Impact Study (IS) could add 1 to 3 months to the 0 phase and increase resource hours in order to conduct early coordination and other required processes under CEQA. The risk to the schedule can be minimized if this determination is made early during PA&ED so that the process can be initiated as soon as possible and occur simultaneously with environmental studies. This determination was based on the following assumptions:

- All work will be conducted from the roadway.
- Mitigation measure will reduce impacts to below the level of significance.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Special Considerations

Visual Quality

The grouping of mature redwoods located on the west side of the highway between Clear Creek and the bus stop (PM 11.39) and identified for removal is potentially a scenic resource. Since no pedestrian improvements are planned at Clear Creek, there does not seem to be justification for removing these trees. The mature redwood across the highway is also potentially a scenic resource; consider measures to retain this tree.

Biological

Work in the vicinity of Clear Creek Bridge could trigger consultations and/or permits if it encroached on jurisdictional areas (i.e. beyond top of bank).

Need and purpose

The proposed work does not appear to fully meet the need and purpose. The lack of shoulders through Brookdale does not address the identified need for bicycle facilities, and the pedestrian facilities stop at Clear Creek, perpetuating the disconnection between lodging and the nearest bus stop. This brings up the question of whether this segment has logical termini, and could cause issues with segmentation, depending on long-term plans.

At Irwin Way, the proposed left-turn lane appears to benefit vehicular traffic with no supporting need. Meanwhile, the benefit to cyclists of eliminating southbound vehicles driving on the shoulder is coincidental and limited. In addition, the proposed work provides no benefit for pedestrians beyond a wider shoulder (shared with cyclists.)

With the long gap between sections in this segment, it is unclear that they have the same need or that they belong united. Alternatives to the current proposal should be considered, both to reduce impacts and to better meet the need and purpose. Within Brookdale, consider developing an alternative that provides a multi-use facility that reduces impacts. At Irwin Way, consider a proposal that would meet the need for cyclists while reducing impacts that would occur from an additional lane, such as a specific bike facility.

Segment 5

The proposed design does not clearly meet the defined need and purpose, therefore design changes at PA&ED can be expected. For the purposes of preliminary review, the anticipated environmental documentation would be an Initial Study with Mitigated ND under CEQA and a Categorical Exclusion under NEPA. The work proposed at Bear Creek Road does not fall into a CE category under CEQA. Furthermore, the project would result in potentially significant impacts to the corridor character from urbanizing features, and to visual quality from wider pavement, canopy clearing, loss of scenic resources, and substantial loss of mature trees and heavy vegetation. The project would require R/W acquisitions of private property for the new left-turn lane, including private recreational areas. Alternatives to reduce these impacts must be considered. The document can be expected to take up to 24 months to complete.

There is a low-to-moderate risk that an EIR could be required if it appears adequate mitigation cannot be incorporated or if cumulative impacts are determined to be significant. Revising the document type to an EIR from an IS could add 1 to 3 months to the 0 phase in order to conduct early coordination and other required processes under CEQA. The risk to the schedule can be minimized if this determination is made early during PA&ED so that the process can be initiated as soon as possible and occur simultaneously with environmental studies.

This determination was based on the following assumptions:

- All work will be conducted from the roadway.
- Mitigation measure will reduce impacts to below the level of significance.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Special Considerations

Visual Quality

There are several elements that would need to be evaluated as scenic resources. This includes street trees, in particular on the east side of the highway at PM 12.67, and a stacked stone wall at PM 12.85. Plans don't show excavation or fill conforming, therefore impacts will likely extend beyond the identified postmile limits.

Cultural Resources

A stacked stone wall at PM 12.85 and one at PM 13.18 are potentially historic features and will need to be evaluated.

Water Quality

The San Lorenzo River and Boulder Creek are on the 2014/2016 Clean Water Act Section 303(d) list for sedimentation. (The San Lorenzo River is also listed for various other impairments.) In addition, the Central Coast Regional Water Quality Control Board (RWQCB) set a total maximum daily load (TMDL) for sediment/siltation for the San Lorenzo River watershed, which limits the TMDLs for pollutants. Widening at the north end of the segment is within the San Lorenzo River watershed; that and the work in the vicinity of Boulder Creek could contribute to sedimentation to the respective waterways. Design pollution prevention Best Management Practices (BMP)s could be required to minimize sediment discharge.

<u>Segment 6</u>

The proposed design does not clearly meet the defined need and purpose nor necessarily have logical termini, therefore design changes at PA&ED are expected. For the purposes of preliminary review, the anticipated environmental documentation is a Categorical Exemption under CEQA and a Categorical Exclusion under NEPA; this would take approximately 14 months to complete. Programming for a CE/CE poses a low risk to the schedule; an Initial Study could be deemed appropriate at PA&ED, mostly due to the urbanization through hardscape and tree and vegetation removal, and to the chance that permits could be required. Greater clearing, pavement, and sidewalks could be considered out of character for the semi-rural setting and therefore potentially significant. Avoiding the impacts altogether and/or minimizing them with enhancement measures is recommended.

This determination was based on the following assumptions:

- All work will be conducted from the roadway.
- All work can be performed within state R/W and minor temporary construction easements (TCE)s.
- There are no potentially significant impacts.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Visual Quality

There is opportunity to improve the bus stop near PM 15.24 as an enhancement measure. Trees planted to provide afternoon shade on the new sidewalk would reduce the visual impact of the additional hardscape. Attention should be given to the decorative stone planter at PM 15.42.

Biology

Widening at the north end of the segment potentially encroaches on the jurisdictional area at Kings Creek. This work could trigger permits, which would preclude the use of a CE under CEQA.

Water Quality

Kings Creek is on the 2014/2016 Clean Water Act Section 303(d) list for sedimentation. Widening at the north end of the segment could contribute to sedimentation; design pollution prevention BMPs could be required to minimize sediment discharge.

Need and Purpose

The limits of the deficiency identified by the need within this segment have not been well defined; this brings into question whether this segment has logical termini, and could cause issues with segmentation, depending on long-term plans. While the northern limits have clearly been defined by the design constraints at Kings Creek Bridge, it is unclear how this specifically relates to the need, since this location is midway between two residential access points. Furthermore, it should be noted that there is no pedestrian refuge along the constrained, sharp curve between PM 15.15 and PM 15.21. For these reasons, the segment could be seen as not meeting the defined purpose.

11. FUNDING

Each table and segment information assumes that the segment will be programmed and start work in January of 2023. Funding and schedules will need to be updated after funding years have been determined

	Range of Estimate				
	Construction	Right-of-Way			
Segment 1	3.5 M – 5.5 M	0 million (M)			
Segment 2	2 M – 3 M	1.246 M			
Segment 3	2 M – 3 M	1.343 M			
Segment 4	1.5 M – 2.5 M	1.262 M			
Segment 5	1.5 M – 2.5 M	0.969 M			
Segment 6	1 M – 2 M	0.252 M			

Capital Outlay Project Estimate

The level of detail available to develop these capital outlay project estimates is only accurate to within the above ranges and is useful for long-range planning purposes only. The capital outlay project estimates should not be used to program or commit State-programmed capital outlay funds.

Segment 1 requires funding contribution for the additional complete streets elements not funded in project 05-1K890.

Segment 1								
Fund Source	Fiscal Yea	Fiscal Year Estimate for the Programmable Alternative						
	22/23	23/24	24/25	25/26	26/27		Future	Total
Component	In thousar	nds of dolla	rs (\$1,000)					
PA&ED Support								0
PS&E Support								0
Right-of-Way Support								0
Construction Support					0			0
Right-of-Way					0			0
Construction					4,448			4,448
Total		0		0	4,448			4,448

Segment 1

*Escalation based on Escalation Memo dated July 1, 2020. The escalation applied to the Construction Capital is escalated at 3.2% per year.

Segment 2

Programming						
Fund Source						
Local	2023	2024	2025	2026	2027	total
Component	In \$1000 d	lollars				
PA&ED Support	\$976					\$976
PS&E Support		\$2,255				\$2,255
Right-of-Way Support		\$617				\$617
Construction Support				\$2,192		\$2,192
Right-of-Way					\$1,246	\$1,246
Construction					\$2,946	\$2,946
Total	\$976	\$2,872	\$0	\$2,192	\$4,192	\$10,233
PS&E Support Right-of-Way Support Construction Support Right-of-Way Construction Total	\$976	\$2,255 \$617 \$2,872	\$0	\$2,192 \$2,192	\$1,246 \$2,946 \$4,192	\$2,255 \$617 \$2,192 \$1,246 \$2,946 \$10,23

Escalation based on Caltrans Escalation Memo dated July 1, 2020. The escalation rates applied to the Support components is 3.0 %. The escalation applied to the Construction Capital is escalated at 3.2 % per year to the mid construction year. The escalation applied to the Right of Way Capital is 5% per year to the funding year.

The support to capital ratio is	97.5	%				
The support to capital ratio is	97.5	70				
Segment 3						
--	-------------------	---------	-------	---------	---------	----------
Programming						
	ı					
Fund Source		-		-	-	-
Local	2023	2024	2025	2026	2027	total
Component	In \$1000 dollars					
PA&ED Support	\$1,275					\$1,275
PS&E Support		\$1,981				\$1,981
Right-of-Way Support		\$1,542				\$1,542
Construction Support				\$1,627		\$1,627
Right-of-Way					\$1,343	\$1,343
Construction					\$2,748	\$2,748
Total	\$1,275	\$3,523	\$0	\$1,627	\$4,091	\$10,516
Escalation based on Caltrans Escalation Memo dated July 1, 2020. The escalation rates applied to the Support components is 3.0 %. The escalation applied to the Construction Capital is escalated at 3.2 % per year to the mid construction year. The escalation applied to the Right of Way Capital is 5% per year to the funding year.						
The support to capital ratio	is		157.1	%		

Segment 4

Programming						
Fund Source	1					
Local	2023	2024	2025	2026	2027	total
Component	In \$1000 dollars					
PA&ED Support	\$999					\$ 9 99
PS&E Support			\$2,522			\$2,522
Right-of-Way Support			\$1,893			\$1,893
Construction Support					\$2,175	\$2,175
Right-of-Way					\$1,262	\$1,262
Construction					\$2,269	\$2,269
Total	\$999	\$0	\$4,415	\$0	\$5,705	\$11,119
Escalation based on Caltrans Escalation Memo dated July 1, 2020. The escalation rates applied to the Support components is 3.0 %. The escalation applied to the Construction Capital is escalated at 3.2 % per year to the mid construction year. The escalation applied to the Right of Way Capital is 5% per year to the funding year.						

The support to capital ratio is 215.0 %

Fund Source						
Local	2023	2024	2025	2026	2027	total
Component	In \$1000 d	ollars				
PA&ED Support	\$1,461					\$1,461
PS&E Support			\$2,060			\$2,060
Right-of-Way Support			\$1,124			\$1,124
Construction Support					\$1,477	\$1,477
Right-of-Way					\$969	\$969
Construction					\$2,748	\$2,748
Total	\$1,461	\$0	\$3,184	\$0	\$5,194	\$9,839

The support to capital ratio is 164.7 %

Segment 6

<u> </u>						
Programming						
Fund Source						
Local	2023	2024	2025	2026	2027	total
Component	In \$1000 dollars					
PA&ED Support	\$817					\$817
PS&E Support		\$1,551				\$1,551
Right-of-Way Support		\$254				\$254
Construction Support				\$1,122		\$1,122
Right-of-Way					\$252	\$252
Construction					\$1,649	\$1,649
Total	\$817	\$1,805	\$0	\$1,122	\$1,901	\$5,645
Escalation based on Caltrans Escalation Memo dated July 1, 2020. The escalation rates applied to the Support components is 3.0 %. The escalation applied to the Construction Capital is escalated at 3.2 % per year to the mid construction year. The escalation applied to the Picht of Way Capital is						

app ų 5% per year to the funding year.

The support to capital ratio is 197.0 %

Capital Outlay Support Estimate

Capital outlay support estimate range for programming PA&ED for this project: \$8 M - 13 M.

12. DELIVERY SCHEDULE

Project Milestones		Milestone Date
Tojeet Winestones		(Month/Day/Year)
PROGRAM PROJECT	M015	05/27/2022
BEGIN ENVIRONMENTAL	M020	09/28/2022
BEGIN PROJECT	M040	07/01/2022
PA & ED	M200	01/10/2025
R/W REQUIREMENTS	M224	12/11/2024
REGULAR R/W	M225	03/11/2025
PS&E TO DOE	M377	05/28/2026
RIGHT OF WAY CERTIFICATION	M410	10/02/2026
READY TO LIST	M460	11/16/2026
FUND ALLOCATION	M470	01/15/2027
HEADQUARTERS ADVERTISE	M480	03/02/2027
AWARD	M495	05/12/2027
APPROVE CONTRACT	M500	05/26/2027
CONTRACT ACCEPTANCE	M600	07/13/2029
END PROJECT	M800	08/23/2030
FINAL PROJECT CLOSEOUT	M900	06/30/2032

Segment 1 (05-1K890 delivery schedule)

Segment 2		
Project Milestones		Milestone Date (Month/Day/Year)
PROGRAM PROJECT	M015	1/3/2023
BEGIN PROJECT REPORT	M040	1/3/2023
BEGIN ENVIRONMENTAL	M020	3/6/2023
R/W MAPS	M224	5/2/2024
PA & ED	M200	5/3/2024
BRIDGE SITE	M221	7/1/2024
REGULAR R/W	M225	9/3/2024
DRAFT STRUCTURES PS&E	M378	10/9/2025
PS&E TO DOE	M377	1/8/2026
R/W CERTIFICATION	M410	7/2/2026
READY TO LIST	M460	7/2/2026
FUND ALLOCATION	M470	10/3/2026
HEADQUARTERS ADVERTISE	M480	11/9/2026
AWARD	M495	1/25/2027
APPROVE CONTRACT	M500	2/8/2027
CONTRACT ACCEPTANCE	M600	2/4/2028
END PROJECT	M800	8/3/2029
Final Project Closeout	M900	7/8/2030

Segment 3		
Project Milestones		Milestone Date (Month/Day/Year)
PROGRAM PROJECT	M015	1/3/2023
BEGIN PROJECT REPORT	M040	1/3/2023
BEGIN ENVIRONMENTAL	M020	3/6/2023
R/W MAPS	M224	5/8/2024
PA & ED	M200	5/8/2024
BRIDGE SITE	M221	7/5/2024
REGULAR R/W	M225	9/3/2024
DRAFT STRUCTURES PS&E	M378	5/8/2025
PS&E TO DOE	M377	6/27/2025
R/W CERTIFICATION	M410	7/6/2026
READY TO LIST	M460	7/6/2026
FUND ALLOCATION	M470	9/29/2026
HEADQUARTERS ADVERTISE	M480	10/23/2026
AWARD	M495	12/12/2026
APPROVE CONTRACT	M500	3/3/2027
CONTRACT ACCEPTANCE	M600	2/28/2028
END PROJECT	M800	9/5/2029
Final Project Closeout	M900	8/7/2030

Segment 4		
Project Milestones		Milestone Date (Month/Day/Year)
PROGRAM PROJECT	M015	1/3/2023
BEGIN PROJECT REPORT	M040	1/3/2023
BEGIN ENVIRONMENTAL	M020	3/2/2023
R/W MAPS	M224	3/26/2025
PA & ED	M200	6/10/2024
BRIDGE SITE	M221	8/6/2024
REGULAR R/W	M225	8/15/2024
DRAFT STRUCTURES PS&E	M378	4/24/2025
PS&E TO DOE	M377	7/21/2025
R/W CERTIFICATION	M410	6/20/2025
READY TO LIST	M460	9/15/2026
FUND ALLOCATION	M470	10/27/2026
HEADQUARTERS ADVERTISE	M480	6/6/2027
AWARD	M495	6/6/2027
APPROVE CONTRACT	M500	8/31/2027
CONTRACT ACCEPTANCE	M600	10/13/2027
END PROJECT	M800	12/27/2027
Final Project Closeout	M900	1/18/2028

beginent 5		
Project Milestones		Milestone Date (Month/Day/Year)
PROGRAM PROJECT	M015	1/3/2023
BEGIN PROJECT REPORT	M040	1/3/2023
BEGIN ENVIRONMENTAL	M020	3/2/2023
R/W MAPS	M224	8/26/2024
PA & ED	M200	8/15/2024
BRIDGE SITE	M221	1/30/2025
REGULAR R/W	M225	3/28/2025
DRAFT STRUCTURES PS&E	M378	4/14/2025
PS&E TO DOE	M377	5/22/2025
R/W CERTIFICATION	M410	6/10/2026
READY TO LIST	M460	7/10/2026
FUND ALLOCATION	M470	12/30/2026
HEADQUARTERS ADVERTISE	M480	2/12/2027
AWARD	M495	4/13/2027
APPROVE CONTRACT	M500	5/25/2027
CONTRACT ACCEPTANCE	M600	8/5/2027
END PROJECT	M800	8/26/2027
Final Project Closeout	M900	8/20/2029

Segment 5

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Segment	6

Project Milestones		Milestone Date
rioject milestones		(Month/Day/Year)
PROGRAM PROJECT	M015	1/3/2023
BEGIN PROJECT REPORT	M040	1/3/2023
BEGIN ENVIRONMENTAL	M020	3/6/2023
R/W MAPS	M224	7/8/2024
PA & ED	M200	7/8/2024
BRIDGE SITE	M221	7/22/2024
REGULAR R/W	M225	9/3/2024
DRAFT STRUCTURES PS&E	M378	7/8/2025
PS&E TO DOE	M377	8/26/2025
R/W CERTIFICATION	M410	7/8/2026
READY TO LIST	M460	12/7/2026
FUND ALLOCATION	M470	2/4/2027
HEADQUARTERS ADVERTISE	M480	3/3/2027
AWARD	M495	5/3/2027
APPROVE CONTRACT	M500	5/24/2027
CONTRACT ACCEPTANCE	M600	5/18/2028
END PROJECT	M800	11/15/2029
Final Project Closeout	M900	10/18/2030

The anticipated funding fiscal year for construction is 2026/2027.

13. RISKS

A risk register has been prepared for the project (see Attachment I). These risks are related to tree removal, plant establishment, Right of Way needs, and utility relocation. All identified risks are given specific risk responses and assigned to appropriate risk managers who will monitor and control the risks.

14. EXTERNAL AGENCY COORDINATION

The project requires the following coordination:

<u>Regional Water Quality Control Board</u> Clean Water Act Section 401 Water Quality Certification

<u>Local Agency</u> Cooperative Agreements with Santa Cruz County Regional Transportation Commission

Local Agency Agreements with County of Santa Cruz

15. PROJECT REVIEWS

	Date 10/06/2020
Berkeley Lindt	Date <u>11/19/2021</u>
Dario Senor	Date <u>11/19/2021</u>
Douglas Hessing	Date 05/23/2022
	Date
	Date 11/19/2021
	Berkeley Lindt Dario Senor Douglas Hessing

16. PROJECT PERSONNEL

Douglas Hessing, Senior Transportation Engineer	(805) 835-6568
Kimberly Ferreyra, Associate Government Program Analyst	(805) 549-3068
Claudia Espino, Senior Transportation Engineer	(559) 899-9041
Joseph Salazar, Project Engineer	(805) 779-0806
John Olejnik, Senior Transportation Planner	(805) 748-1787
Gustavo Alfaro, Associate Transportation Planner	(805) 835-6490
Lara Bertaina, Senior Environmental Planner	(805) 779-0792
Paula Huddleston, Associate Environmental Planner	(805) 305-3635
Dario Senor, Senior Transportation Engineer	(805) 549-3017
Gregory Cannoles, Transportation Engineer	(805) 549-3025
Brianna Goodman, Transportation Planner, SCCRTC	(831) 460-3200
Sarah Christensen, Senior Transportation Engineer, SCCRTC	(831) 460-3200

17. ATTACHMENTS

- A. Location map
- B. Schematics/study area map for each segment
- C. Cross sections
- D. Project and Segment Cost Estimates
- E. PEAR
- F. Transportation (TPSIS)
- G. Right of Way Sheet
- H. Risk register
- I. Highway 9 San Lorenzo Valley Complete Streets Corridor Plan
- J. Distribution list

Attachment A



Attachment B

Segment 2 - SLV School



Segment 2 - SLV School

SCR - 9 - 6.46/15.53



Class II Bike Lane

Striping

Segment 2 - SLV School

SCR - 9 - 6.46/15.53



Class II Bike Lane

Striping

Segment 2 - SLV School

SCR - 9 - 6.46/15.53



Class II Bike Lane

Striping

Segment 2 - SLV School





Segment 2 - SLV School

SCR - 9 - 6.46/15.53



Class II Bike Lane

Striping

Segment 2 - SLV School





Segment 2 - SLV School





Segment 2 - SLV School



Segment 2 - SLV School



Segment 2 - SLV School



Segment 2 - SLV School



Segment 2 - SLV School



Segment 2 - SLV School



Segment 2 - SLV School





Segment 2 - SLV School

SCR - 9 - 6.46/15.53



 Utility Relocation
 Sidewalk
 Class III Bike Route

 Enhanced Crosswalk
 Striping
 Class II Bike Lane

Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond





Segment 3 - Ben Lomond



Segment 3 - Ben Lomond


Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond

SCR - 9 - 6.46/15.53



Legend





Segment 3 - Ben Lomond



Segment 3 - Ben Lomond







	New Closswalk	Irali
Utility Relocation	Sidewalk	Class III Bike Route
Enhanced Crosswalk	- Striping	Class II Bike Lane

Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond



Segment 3 - Ben Lomond

SCR - 9 - 6.46/15.53



Class II Bike Lane

Striping

Enhanced Crosswalk

Segment 4 - Brookdale



Segment 4 - Brookdale





Segment 4 - Brookdale





Segment 4 - Brookdale

SCR - 9 - 6.46/15.53



Class II Bike Lane

Striping

Enhanced Crosswalk

Segment 4 - Brookdale



Segment 4 - Brookdale







Segment 4 - Brookdale



Segment 4 - Brookdale





Segment 4 - Brookdale



Segment 5 - Boulder Creek

SCR - 9 - 6.46/15.53



Class II Bike Lane

Striping

Enhanced Crosswalk

Segment 5 - Boulder Creek

SCR - 9 - 6.46/15.53



Class II Bike Lane

Striping

Enhanced Crosswalk

Segment 5 - Boulder Creek



Segment 5 - Boulder Creek

SCR - 9 - 6.46/15.53



Class II Bike Lane

Striping

Enhanced Crosswalk

Segment 5 - Boulder Creek





Segment 5 - Boulder Creek



Segment 5 - Boulder Creek





Segment 5 - Boulder Creek



Segment 5 - Boulder Creek





Segment 5 - Boulder Creek





Segment 5 - Boulder Creek



Segment 5 - Boulder Creek



Segment 5 - Boulder Creek





Segment 5 - Boulder Creek


EA: 05-1M550

Segment 5 - Boulder Creek

SCR - 9 - 6.46/15.53



 EA: 05-1M550
 Segment 6 - North of Boulder Creek
 SCR - 9 - 6.46/15.53











Legend



EA: 05-1M550 Segment 6 - North of Boulder Creek SCR - 9 - 6.46/15.53





Class II Bike Lane

Striping

Enhanced Crosswalk

Attachment C

Schools: Graham Hill Rd to Glen Arbor N, PM 6.460 to 8.115









Ben Lomond: Highland Park to Jacobson Ln, PM 8.492 to 10.062









					1
	¥	Ļ	1	1	
6'	5′	12'	12′	5′	6'
Sidewalk	Bike lane	Drive lane	Drive lane	Bike lane	Sidewalk



↓	Ļ	1	1
5′	12′	12′	5′
Bike lane	Drive lane	Drive lane	Bike lane

Brookdale: Western Dr to Irwin Way, PM 11.123 to 12.180





	Ļ	1	1	
5′	12′	10′	12'	5′
	Drive lane	Turn lane	Drive lane	

Boulder Creek: River St to Bear Creek Rd, PM 12.450 to 13.239









					-
	Ŧ	Ļ	1	1	1
10′	5′	12′	10′	12'	5′
Sidewalk	Bike lane	Drive lane	Turn lane	Drive lane	Bike lane

North of Boulder Creek: Pleasant Way to Pool Dr, PM 15.084 to 15.422



Attachment D

Combined Total Estimate

Project Study Report – Project Development Support Capital Outlay Project Estimate

Dist - Co - Rte <u>05-SCRr-9</u>

PM_____4.00/15.422

Program Code_____

Project Number 520000015

Month/Year August/2021

PROJECT DESCRIPTION:

Limits: Along SR 9 in Santa Cruz County from Henry Cowell State Park to Pool Dr

Proposed Improvement (Scope): <u>Widen road, improve bus stops, install bike routes and</u> <u>lanes, install sidewalks, install multi-use paths, install crosswalks, improve driveway, and</u> <u>enhance parking</u>

Alternate: Alternative 1_____

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ 8 M – 13 M
TOTAL STRUCTURE ITEMS	\$
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$
SUBTOTAL CONSTRUCTION COSTS	\$
TOTAL RIGHT-OF-WAY ITEMS	\$ 4,329,765
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ 12 M – 18 M

	Average Cost per Lane Mile	<u>e</u>	Number of Lane Miles		<u>Total Cost</u>
Total Cost	\$485,000	X	17.291	=	\$8,380,000

Explanation:

Roadway work includes removal of embankment material, bus stop improvements, lane widening, 700 LF -15 ft tall retaining wall, striping, intersection improvements, enhanced crosswalks, landscape improvements including tree planting, and driveway improvements.

TOTAL ROADWAY ITEMS

\$8 M - 13 M

II. STRUCTURES ITEMS

	Structure	Structure	Structure
	(1)	(2)	(3)
Bridge Name			
Total Cost for Structure			

Explanation:

TOTAL STRUCTURE ITEMS

\$_____

III. ENVIRONMENTAL MITIGATION

	Quantity	<u>Unit</u>	Unit Price		Item Cost
Environmental Mitigation	1	X		=	

Explanation:

Mitigation Cost included in the Right of Way Estimate

TOTAL ENVIRONMENTAL MITIGATION ITEMS

IV. RIGHT-OF-WAY ITEMS

		Escalated Value
A. Acquisition, including exce damages to remainder(s) ar	ss lands, Id Goodwill	\$ 834,937_
B. Utility Relocation (State sh	are)	\$ 4,056,028

Anticipated Date of Right-of-Way Certification 2024_____ (Date to which values are escalated)

Explanation:

Further discussion of Right of Way items is included in individual segment cost estimates

\$ 4,329,765

Segment 1 Estimate

Project Study Report – Project Development Support Capital Outlay Project Estimate

Dist - Co - Rte 05-SCR-9

PM 4.000/6.460

Program Code_____

Project Number 0520000015

Month/Year August/2021

PROJECT DESCRIPTION:

Limits: Along SR 9 in Santa Cruz County from Henry Cowell State Park to Graham Hill Rd, ______

Proposed Improvement (Scope): <u>Widen road, install bike routes-, install multi-use path,</u> sidewalks, and crosswalks

Alternate: Alternative 1

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ 0.5 M – 1.0 M
TOTAL STRUCTURE ITEMS	\$ 2.1 M – 2.8 M
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$ *
SUBTOTAL CONSTRUCTION COSTS	\$ 2.6 M – 3.8 M
TOTAL RIGHT-OF-WAY ITEMS	\$* <u></u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ 2.6 M – 3.8 M

Note: * This item included in Felton CAPM project 1K890 if the funding for complete streets elements is added prior to PS&E phase.

	Average Cost per Lane Mile		Number of	of Lane Miles		Total Cost
Total Cost	\$300,000	Х	2		=	\$600.000

Explanation: This estimate includes complete street elements not funded for construction in the project 05-1K890 – Felton CAPM, Section 9, Alternatives, Feature 10, Complete Streets:

- c. New shoulder (4-5') between Oak Avenue to Laurel Dr. The following items include complete streets elements:
 - i. Includes improvements at the Henry Cowell entrance and intersection with Redwood Drive improvements at PM 5.78. Sidewalk with curb ramp would be placed on the northern side of Big Trees Park Road for access to the existing crosswalk.
 - ii. Drainage system at PM 5.78 will require a viaduct on both sides of SR 9 includes sidewalk to connect to the multi-use path.
 - iii. Tree removal
- d. New shoulder (4-5') from San Lorenzo Avenue to Oak Avenue
 - i. Viaduct would be constructed to accommodate the multiuse path and guardrail at PM 5.55
 - ii. Tree removal
- e. New shoulder (4-5') from Lakeview Drive to San Lorenzo Avenue i. Tree removal and grading
 - Paved pull out areas
 - i. PM 2.78, 2.97, 3.55, 4.35, 4.62, 5.45
 - ii. PM 3.292 and remove tree
- g. Pave parking area and incorporate multi-use path at the southern Henry Cowell State Park Entrance and trailheads
 - i. PM 4.67
 - ii. PM 2.68

TOTAL ROADWAY ITEMS

\$ 0.5 M - 1 M

II. STRUCTURES ITEMS

f.

	Structure (1)	Structure (2)	Structure (3)
Sidehill Viaduct @ PM 5.55	<u>\$460,000 to</u> <u>\$610,000</u>		
Sidehill Viaduct @ PM 5.92	<u>\$1,590,000 to</u> <u>\$2,120,000</u>		

Explanation: The sidewalk at the entrance to Henry Cowell entrance will require 2-viaducts – on both sides of the street and the multi-use path at PM 5.55 will also require a viaduct.

TOTAL STRUCTURE ITEMS

\$2.1 M - \$2.8 M

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	Unit Price		Item Cost
Environmental Mitigation	1	X		=	

Explanation:

This item included in Felton CAPM project 1K890 if the funding for complete streets elements is added prior to PS&E phase.

TOTAL ENVIRONMENTAL MITIGATION ITEMS \$_____

IV. RIGHT-OF-WAY ITEMS

		Escalated Value
A.	Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$

B. Utility Relocation (State share) \$

Explanation:

This item included in Felton CAPM project 1K890 if the funding for complete streets elements is added prior to PS&E phase.

TOTAL RIGHT-OF-WAY ITEMS	\$
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Segment 2 Estimate

Project Study Report – Project Development Support Capital Outlay Project Estimate

Dist - Co - Rte <u>05-SCRr-9</u>

PM 6.46/8.115

Program Code_____

Project Number <u>520000015</u>

Month/Year August/2021

PROJECT DESCRIPTION:

Limits: Along SR 9 in Santa Cruz County from Graham Hill Rd to Glen Arbor N

Proposed Improvement (Scope): Widen road, install bike routes-, install multi-use path, sidewalks, and crosswalks

Alternate: Alternative 1_____

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ 2 M – 3 M
TOTAL STRUCTURE ITEMS	\$
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$
SUBTOTAL CONSTRUCTION COSTS	\$
TOTAL RIGHT-OF-WAY ITEMS	\$ 1,076,656
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ 3 M – 4 M

	Average Cost per La	<u>ne Mile</u>	Number of La	<u>ine Miles</u>	Total Cost
Total Cost	\$400,000	X	5.33	=	\$2,130,000

Explanation:

Roadway work includes removal of embankment material, widen road, striping, intersection improvements, landscape improvements including tree planting, and enhanced crosswalks.

TOTAL ROADWAY ITEMS	\$ 2 M – 3 M
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II. STRUCTURES ITEMS

	Structure	Structure	Structure
	(1)	(2)	(3)
Soil Nail Wall			
Total Cost for Structure			

Explanation:

TOTAL STRUCTURE ITEMS

\$_____

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	Unit Price		Item Cost
Environmental Mitigation	1	X		=	

Explanation:

Mitigation Cost included in the Right of Way Estimate

TOTAL ENVIRONMENTAL MITIGATION ITEMS

IV. RIGHT-OF-WAY ITEMS

		Escalated Value
A. 7	Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$ 209,820
B. T	Utility Relocation (State share)	\$ 1,002,793

Anticipated Date of Right-of-Way Certification 2024_____ (Date to which values are escalated)

Explanation:

This Project is a multi-modal corridor improvement project and this Segment will have 34 acquisition areas on 25 parcels by way of Temporary Construction Easements (TCE) and Permanent Easement (some parcels have two). The parcels include both residential and commercial uses of varying capacities. No apparent improvements within the easement areas or appear to be affected by construction in the manner proposed. Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

TOTAL RIGHT-OF-WAY ITEMS

\$ 1,076,656

Segment 3 Estimate

Project Study Report – Project Development Support Capital Outlay Project Estimate

Dist - Co - Rte <u>05-SCRr-9</u>

PM 8.492/10.062

Program Code_____

Project Number <u>520000015</u>

Month/Year August/2021

PROJECT DESCRIPTION:

Limits: Along SR 9 in Santa Cruz County from Highland Park to Jacobson Ln

Proposed Improvement (Scope): Widen road, improve bus stops, install bike routes and lanes, install multi-use path, sidewalks, crosswalks, and enhance parking

Alternate: Alternative 1_____

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ 2 M – 3 M
TOTAL STRUCTURE ITEMS	\$
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$
SUBTOTAL CONSTRUCTION COSTS	\$
TOTAL RIGHT-OF-WAY ITEMS	\$ 1,160,313
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ 3 M – 4 M

	Average Cost per L	ane Mile	Number of I	Lane Miles	<u>Total Cost</u>
Total Cost	\$624,000	X	3.59	=	\$2,240,000

Explanation:

Roadway work includes removal of embankment material, bus stop improvements, lane widening, striping, intersection improvements, enhanced crosswalks, landscape improvements including tree planting, and enhanced parking.

TOTAL ROADWAY ITEMS 2 M - 3 M

II. STRUCTURES ITEMS

	Structure	Structure	Structure
	(1)	(2)	(3)
Bridge Name			
Total Cost for Structure			

Explanation:

TOTAL STRUCTURE ITEMS

\$_____

III. ENVIRONMENTAL MITIGATION

	Quantity	<u>Unit</u>	Unit Price		Item Cost
Environmental Mitigation	1	X		=	

Explanation:

Mitigation Cost included in the Right of Way Estimate

TOTAL ENVIRONMENTAL MITIGATION ITEMS

IV. RIGHT-OF-WAY ITEMS

		Escalated Value
A.	Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$ 108,527_
B.	Utility Relocation (State share)	\$ 1,208,271

Anticipated Date of Right-of-Way Certification 2024_____ (Date to which values are escalated)

Explanation:

This Project is a multi-modal corridor improvement project and this Segment will have 23 acquisition areas on 20 parcels by way of Temporary Construction Easements (TCE) and Permanent Easement (some parcels have both). The parcels include both residential and commercial uses of varying capacities. No apparent improvements within the easement areas or appear to be affected by construction in the manner proposed. Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

TOTAL RIGHT-OF-WAY ITEMS

\$ 1,160,313

Segment 4 Estimate

Project Study Report – Project Development Support Capital Outlay Project Estimate

Dist - Co - Rte <u>05-SCRr-9</u>

PM____11.123/12.18

Program Code_____

Project Number <u>520000015</u>

Month/Year August/2021

PROJECT DESCRIPTION:

Limits: Along SR 9 in Santa Cruz County from Western Dr to Irwin Wy

Proposed Improvement (Scope): Widen road, improve bus stops, install multi-use path, sidewalks, crosswalks, and enhance parking

Alternate: Alternative 1_____

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ 1.5 M – 2.5 M
TOTAL STRUCTURE ITEMS	\$
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$
SUBTOTAL CONSTRUCTION COSTS	\$
TOTAL RIGHT-OF-WAY ITEMS	\$ 1,037,948

TOTAL PROJECT CAPITAL OUTLAY COSTS

\$ 2.5 M – 3.5 M

	Average Cost per I	Lane Mile	Number of	Lane Miles	<u>Total</u> (<u>Cost</u>
Total Cost	\$1,806,000	X	0.72	=	<u>\$1,300</u>),000

Explanation:

Roadway work includes removal of embankment material, importing and constructing embankment, bus stop improvement, lane widening, striping, enhanced crosswalks, landscape improvements including tree planting, and new left turn channelization.

TOTAL ROADWAY ITEMS \$ 1.5M –2.5M

II. STRUCTURES ITEMS

	Structure	Structure	Structure
	(1)	(2)	(3)
Bridge Name			
Total Cost for Structure			

Explanation:

TOTAL STRUCTURE ITEMS

\$_____

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	Unit Price		Item Cost
Environmental Mitigation	n	X		=	

Explanation:

Mitigation Cost included in the Right of Way Estimate

TOTAL ENVIRONMENTAL MITIGATION ITEMS

IV. RIGHT-OF-WAY ITEMS

		Escalated Value
А.	Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$ 274,936
B.	Utility Relocation (State share)	\$ 889,924

Anticipated Date of Right-of-Way Certification 2024_____ (Date to which values are escalated)

Explanation:

This Project is a multi-modal corridor improvement project and this Segment will have 27 acquisition areas on 24 parcels by way of Temporary Construction Easements (TCE) and Permanent Easement (some parcels have both). The parcels include both residential and commercial uses of varying capacities. No apparent improvements within the easement areas or appear to be affected by construction in the manner proposed. Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

TOTAL RIGHT-OF-WAY ITEMS

\$<u>1,037,948</u>

Segment 5 Estimate

Project Study Report – Project Development Support Capital Outlay Project Estimate

Dist - Co - Rte <u>05-SCRr-9</u>

PM 12.45/13.239

Program Code_____

Project Number <u>520000015</u>

Month/Year August/2021

PROJECT DESCRIPTION:

Limits: Along SR 9 in Santa Cruz County from River St to Bear Creek Rd

Proposed Improvement (Scope): Widen road, improve bus stops, install bike routes and lanes, install multi-use path, sidewalks, crosswalks, and enhance parking

Alternate: Alternative 1_____

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ 1.5 M – 2.5 M
TOTAL STRUCTURE ITEMS	\$
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$
SUBTOTAL CONSTRUCTION COSTS	\$
TOTAL RIGHT-OF-WAY ITEMS	\$ 836,948

TOTAL PROJECT CAPITAL OUTLAY COSTS

\$ 2.5 M – 3.5 M

	Average Cost per La	ane Mile	Number of La	ne Miles	Total Cost
Total Cost	\$859,000	X	2.015	=	\$1,730,000

Explanation:

Roadway work includes removal of embankment material, bus stop improvements, lane widening, striping, intersection improvements, enhanced crosswalks, landscape improvements including tree planting, and enhanced parking.

TOTAL ROADWAY ITEMS

II. STRUCTURES ITEMS

	Structure	Structure	Structure
	(1)	(2)	(3)
Bridge Name			
Total Cost for Structure			

Explanation:

TOTAL STRUCTURE ITEMS

\$_____

\$1.5M - 2.5M

III. ENVIRONMENTAL MITIGATION

	Quantity	<u>Unit</u>	Unit Price		Item Cost
Environmental Mitigation	l	X		=	

Explanation:

Mitigation Cost included in the Right of Way Estimate

TOTAL ENVIRONMENTAL MITIGATION ITEMS

IV. RIGHT-OF-WAY ITEMS

		Escalated Value
A.	Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$ 231,525
B.	Utility Relocation (State share)	\$ 716,280

Anticipated Date of Right-of-Way Certification	2024
(Date to which values are escalated)	

Explanation:

This Project is a multi-modal corridor improvement project and this Segment will have 17 acquisition areas on 12 parcels by way of Temporary Construction Easements (TCE) and Permanent Easement (some parcels have both). The parcels include both residential and commercial uses of varying capacities. No apparent improvements within the TCE areas or appear to be affected by construction in the manner proposed.

Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

TOTAL RIGHT-OF-WAY ITEMS

\$836,948

Segment 6 Estimate

Project Study Report – Project Development Support Capital Outlay Project Estimate

Dist - Co - Rte <u>05-SCRr-9</u>

PM____15.084/15.422

Program Code_____

Project Number <u>520000015</u>

Month/Year August/2021

PROJECT DESCRIPTION:

Limits: Along SR 9 in Santa Cruz County from Pleasant Way to Pool Dr

Proposed Improvement (Scope): Widen road, improve bus stop, install bike routes, install sidewalks, install crosswalks, and improve driveway

Alternate: Alternative 1_____

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ 1 M – 2 M
TOTAL STRUCTURE ITEMS	\$
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$
SUBTOTAL CONSTRUCTION COSTS	\$
TOTAL RIGHT-OF-WAY ITEMS	\$ 217,900

TOTAL PROJECT CAPITAL OUTLAY COSTS

\$ 1 M – 3 M_____

:	Average Cost per L	ane Mile	Number of L	ane Miles	Total Cost
Total Cost	\$1,447,000	X	0.676	=	<u>\$978,000</u>

Explanation:

Roadway work includes removal of embankment material, bus stop improvements, lane widening, striping, enhanced crosswalks, landscape improvements including tree planting, and driveway improvements.

TOTAL ROADWAY ITEMS

\$1 M - 2 M

II. STRUCTURES ITEMS

	Structure	Structure	Structure
	(1)	(2)	(3)
Bridge Name			
Total Cost for Structure			

Explanation:

TOTAL STRUCTURE ITEMS

\$_____
III. ENVIRONMENTAL MITIGATION

	Quantity	<u>Unit</u>	Unit Price		Item Cost
Environmental Mitigation	1	X		=	

Explanation:

Mitigation Cost included in the Right of Way Estimate

TOTAL ENVIRONMENTAL MITIGATION ITEMS

IV. RIGHT-OF-WAY ITEMS

		Escalated Value
А.	Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$ 10,129_
В.	Utility Relocation (State share)	\$ 238,760_

Anticipated Date of Right-of-Way Certification 2024_____ (Date to which values are escalated)

Explanation:

This Project is a multi-modal corridor improvement project and this Segment will impact two parcels by way of Temporary Construction Easements (TCE). The parcels are both zoned for single family residence and are currently being used for that purpose. No apparent improvements within the TCE areas or appear to be affected by construction in the manner proposed.

Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

TOTAL RIGHT-OF-WAY ITEMS \$217,900

Attachment E

Preliminary Environmental Analysis Report

Project Information

DIST-CO-RTE: 05-SCr-9PM/PM: 6.46/15.42EA: 05-1M550KEFIS Project ID: 052000015Project Title: San Lorenzo Valley Complete StreetsProject Manager: Doug HessingProject Engineer: Claudia EspinoPhone: 805-835-6568Project Engineer: Claudia EspinoPhone: 559-899-9041Environmental Senior: Lara BertainaPhone: 805-779-0792PEAR Preparer: Paula HuddlestonPhone: 805-305-3635

General Corridor Improvements

Purpose

- Provide safe mobility for all road users, including bicyclists, pedestrians, transit vehicles, and motor vehicles.
- Improve multimodal operations at SR9 intersections.
- Reduce vehicle speeds on Highway 9.
- Enhance pedestrian and bicycle mobility.
- Improve pedestrian and bicycle connectivity to transit.
- Improve visibility of pedestrians and bicyclists at crosswalks.
- Provide pedestrian and bicycle connections from neighborhoods to schools, parks, and commercial centers.

Need

- Currently many of the town centers lack Main Street facilities such as sidewalks and bike lanes.
- Due to constrained right of way, there are very limited opportunities for pedestrians and bicyclists to comfortably navigate along or across SR9.
- Vehicle traffic is frequently moving at significantly above the posted speed limit, discouraging multimodal use of the corridor.
- Facilities lack ADA compliant connectivity to bus stops and other destinations.

Description of work

This project proposes to improve multi-modal use of the Highway 9 corridor by widening the highway to provide wider shoulders and 6-foot sidewalks, improving bus stops, installing Class III bike routes and Class II bike lanes, constructing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

General Environmental Considerations

The following information applies to all segments of the project.

Visual Quality

Highway 9 within the project limits is eligible for scenic highway designation. Therefore, caution should be exercised with any activity or change that could threatened its eligibility. The proposed work will widen the highway corridor and add urbanizing elements in otherwise rural areas, removing mature trees and thick vegetation and clearing more of the forest canopy. Furthermore, because trees are growing close together, it might not be possible to remove only the one(s) within the area of disturbance without damaging the root systems of the adjacent trees, therefore tree removal could be higher than anticipated without avoidance measures. These impacts could be considered potentially significant on any of the segments, some more so than others. Mitigation and enhancements to minimize impacts would support the purpose of the project(s) by helping to create a more pedestrian- and bicycle-friendly environment.

Biology

There is potential for the presence of protected species and critical habitat within the areas of disturbance; surveys will require 10-12 months. However, most project impacts will occur on previously developed or disturbed areas adjacent to the highway, so federally and state listed species are not expected to be encountered. If permits to enter are required, a request should be submitted to R/W at least 2 months in advance in order to obtain them by the required date.

The project includes removal of mature redwoods. Santa Cruz County Code 16.34.010 identifies the objective to preserve significant trees and forest communities on public and private properties. Trees that must be removed would be evaluated to determine whether they were significant trees as defined by the code. Tree removal should be minimized and scheduled outside of nesting season if possible.

Cultural Resources

Properties over 50 years old that could be impacted by the project (this includes work adjacent to the properties) will have to be evaluated for eligibility in the National Register. The risk of adverse impacts to eligible properties is low, however the required studies and document preparation is expected to take 12 months. *This will likely be critical path for all segments* unless a screened undertaking is deemed appropriate.

Air quality

The project is within the North Central Coast air basin and is in attainment for all federal levels of air quality pollutants, but non-attainment/transitional for the state level for ozone and non-attainment for the state level for PM¹⁰. Special consideration might be necessary during construction to reduce emissions and dust. No conformity requirements apply to any segment.

Construction

If traffic detours are required, they must be reviewed by Environmental staff to determine if there are any associated impacts. Construction should be timed to have as little impact on traffic as possible. The timing of construction should also consider impacts on local businesses when in urban areas due to detours, congestion, noise,

and/or reduced parking. This could mean performing work at night when the commercial centers are closed, and traffic volumes are low. Night work near residences should be avoided, however. Temporary construction noise, even when in compliance with Caltrans' nighttime noise levels, does not preclude significant impacts from noise.

Cumulative impacts

Impacts could be determined to be less than significant for any individual segment, however consideration must be given to the impacts that have occurred to the overall corridor over time, particularly in the areas of visual quality and community character, to which these projects will contribute. Taken as a whole, the changes to the Highway 9 corridor could be considered cumulatively significant, which would require an EIR for one or more segments.

Anticipated Environmental Commitments (applicable to all segments)

- Contractor will be limited to the minimum area necessary at each location. ESAs will be established outside of these areas.
- The construction schedule shall be well publicized in advance, particularly to residences and businesses most likely affected by construction activities.
- Prior to removal, trees must be evaluated to determine whether they are significant trees as defined by Santa Cruz County Code 16.34.010. Significant trees that are removed shall be replanted at a ratio adequate for impacts to habitat.
- Tree removal should be scheduled to occur between September 1 and February 15. Tree replacement would be at a minimum of 3:1. The project will also include erosion control, irrigation, and a one-year plant establishment period. Additional locations could be required for replanting.
- Hand excavation will be required where necessary to reduce impacts to root systems.
- Disturbed areas will be graded to a natural appearance and revegetated; erosion control applied where appropriate.
- Aesthetic elements and/or treatments will be included to reduce the appearance of highway and/or urbanizing features and to improve the user experience. These elements might include benches, improved bus stops, bike racks, decorative lighting, art installments, surface treatments, etc. Guardrail and other metal components will be treated to reduce glare.

PSR Summary Statement

(The following paragraph *must go directly into the PSR* <u>for all segments</u>, in addition to the text prepared for each individual segment.)

In order to identify environmental issues, constraints, costs, and resource needs, a PEAR was prepared for the project. Potential disposal, staging, and borrow sites will need to be identified in the PA&ED phase for complete environmental review. Field studies were not conducted, and technical studies have been deferred to the PA&ED phase. Potential disposal, staging, and borrow sites will need to be identified in the PA&ED phase for complete environmental review.

Individual Segment Improvements

This section provides information that is specific to the individual segments. Segment 1, which covers PM 4.0 to PM 6.46, was included in EA 05-1K890K and therefore was not evaluated with this project.

Segment 2

Schools: Graham Hill Rd to Glen Arbor Rd PM 6.46*/8.11

*Proposed work does not begin until PM 7.0. The corridor between 6.46 and 7.0 was not evaluated.

Purpose

- Provide pedestrian and bicycle connection from Glen Arbor neighborhoods to SLV Schools Complex.
- Provide pedestrian and bicycle connection from Glen Arbor neighborhoods to San Lorenzo Valley Schools Complex.
- Improve vehicle and transit circulation at SLV Schools Complex in coordination with the school circulation plan.

Need

- Deficient pedestrian and bicycle facilities to the SLV Schools Complex entrance along SR9.
- Poor circulation to and past the SLV complex.

Description of Work

Restripe roadway; add multi-use pathway in select locations; delineate crosswalks; provide continuous sidewalk on the west side of the route from El Solyo Heights Drive to Glen Arbor Road, and on the east side in the vicinity of Ben Lomond. Substantial excavation of cut slope and vegetation removal on the west side will be required from the San Lorenzo River (PM 8.9) to just past Sunnycroft Road (PM 7.99).

Anticipated Environmental Approval

CEQA (choose one):

Exemption

Statutory Categorical Common Sense

Initial Study or Focused Initial Study with proposed Negative Declaration (ND) or Mitigated ND

Environmental Impact Report

NEPA (choose one):

 \boxtimes Categorical Exclusion

Environmental Assessment with Finding of No Significant Impact

Routine Complex

PSR Summary Statement

(This section, preceded by the paragraph under General, must be copied into the PSR.)

The anticipated environmental documentation is a Categorical Exemption under CEQA and a Categorical Exclusion under NEPA; this would take approximately 14 months to complete. Programming for a CE/CE poses a moderate risk to the schedule; an Initial Study could be deemed appropriate at PA&ED, mostly due to the urbanization through hardscape and tree and vegetation removal. Attention must be given to the changes to the character of the corridor resulting from the improvements. At the northern and southern ends of the segment, greater clearing and additional sidewalks would not be out of place in the suburban setting, however this impact could be considered potentially significant in the middle, rural section of the segment. Modifying the project to avoid the impacts altogether or minimizing them with enhancement measures is recommended.

This determination was based on the following assumptions:

- All work will be conducted from the roadway.
- No new R/W beyond minor TCEs will be required.
- There are no potentially significant impacts.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Special Considerations

Visual Quality

From approximately PM 7.65/PM 7.97, work involves substantial widening for sidewalk, curb, and gutter through an otherwise undeveloped stretch of forested highway. In some locations, cutting into an existing, heavily vegetated cut slope would be required. The clearing for this widening, in addition to the hardscape and urban elements, could be considered a potentially significant impact. Consideration should be given to the old highway alignment in the vicinity of PM 7.59 for revitalization and reforesting.

Segment 3

Ben Lomond: Highland Park to Ben Lomond PM 8.49/10.06

Purpose

 Provide pedestrian and bicycle connection from Ben Lomond to Highland Park and nearby lodging.

Need

 Deficient pedestrian and bicycle facilities along commercial corridor to Highland Park entrance.

Description of Work

Widen and restripe roadway to provide a left-turn lane at Highland Park; widen shoulders; construct a sidewalk or multi-use path on the east side of the highway (with a gap between San Lorenzo River and Marshall Creek); refurbish existing sidewalks on both sides; delineate crosswalks. Slope excavation and fill required from PM 8.56 to PM 8.81 (Shadowbrook Rd) appears mostly minor, with one location north of Highland Park likely requiring excavation on a higher, steeper slope.

Anticipated Environmental Approval

CEQA	(choose	one):
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IXI	⊢xem	ntion
		P

Statutory Categorical Common Sense

Initial Study or Focused Initial Study with proposed Negative Declaration (ND) or Mitigated ND

Environmental Impact Report

NEPA (choose one):

 \boxtimes Categorical Exclusion

Environmental Assessment with Finding of No Significant Impact

Routine Complex

Environmental Impact Statement

PSR Summary Statement

(This section, preceded by the paragraph under General, must be copied into the PSR.)

The proposed design does not fully meet the defined purpose due to a gap in the pedestrian facility; this could necessitate design changes at PA&ED. For the purposes of preliminary review, the anticipated environmental documentation would be a Categorical Exemption under CEQA and a Categorical Exclusion under NEPA; this would take approximately 14 months to complete. Programming for a CE/CE poses a moderate risk to the schedule; an Initial Study could be deemed appropriate at PA&ED,

mostly due to tree and vegetation removal. Avoiding the impacts altogether and/or minimizing them with enhancement measures is recommended.

This determination was based on the following assumptions:

- All work will be conducted from the roadway.
- All work can be performed within state R/W.
- There are no potentially significant impacts.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Special Considerations

Visual Quality

Cutting into an existing, heavily vegetated cut slope would be required north of Highland Park, along with other vegetation removal, and could be considered a potentially significant impact. The change to the corridor character should be particularly considered between the north end of Ben Lomond and the San Lorenzo River, where there will be added sidewalk, curb, and gutter and loss of mature trees. Consideration should be given to the old highway alignment in the vicinity of PM 8.5 for revitalization and reforesting.

Need and purpose

The gap in any type of pedestrian walkway between the San Lorenzo River and Marshall Creek weakens the stated need and purpose for this segment.

Segment 4

Brookdale: Western Drive to Irwin Way PM 11.12/12.18

Purpose

- Provide pedestrian and bicycle connections to bus stops and lodging
- Provide safe mobility for all users at Irwin Way intersection.

Need

Lack of pedestrian or bicycle facilities along SR9 in this segment

Description of Work

The work reviewed for the Brookdale portion extends from PM 11.13 (south of Larkspur St) to PM 11.43 (Pacific St.) It involves widening for new sidewalks, curb, and gutter on both sides of the highway except for one stretch of multi-use path between Alameda Ave and Cascade Ave on the east side. It will also include restriping and delineating crosswalks, but no shoulder widening.

The work reviewed for the Irwin Way portion involves widening from approximately PM 11.94 to PM 12.18 to construct a new southbound left-turn lane and 3-foot shoulders.

Anticipated Environmental Approval

CEQA (choose one):
Exemption
🗌 Statutory 🔲 Categorical 🔲 Common Sense
⊠ Initial Study with Mitigated ND
Environmental Impact Report
NEPA (choose one):
Categorical Exclusion
Environmental Assessment with Finding of No Significant Impact
Routine Complex
Environmental Impact Statement

PSR Summary Statement

(This section, preceded by the paragraph under General, must be copied into the PSR.)

The proposed design does not clearly meet the defined need and purpose nor necessarily have logical termini, therefore design changes at PA&ED can be expected. For the purposes of preliminary review, the anticipated environmental documentation would be an Initial Study with Mitigated ND under CEQA and a Categorical Exclusion under NEPA. The work proposed at Irwin Way does not fall into a CE category under CEQA. Furthermore, it would result in potentially significant impacts from urbanization due to a wider expanse of pavement, loss of scenic resources, and substantial loss of mature trees and heavy vegetation. Depending on the extent of R/W at Irwin Way, the project could take large quantities of private property, but regardless would eliminate a considerable amount of roadside parking that could be necessary for residents, considering the steep landform. Alternatives to reduce these impacts must be considered. The document can be expected to take up to 24 months to complete.

There is a low-to-moderate risk that an EIR could be required if it appears adequate mitigation cannot be incorporated or if cumulative impacts are determined to be significant. Revising the document type to an EIR from an IS could add 1 to 3 months to the 0 phase in order to conduct early coordination under CEQA. The risk to the schedule can be minimized if this determination is made early during PA&ED so that the process can be initiated as soon as possible and occur simultaneously with environmental studies.

This determination was based on the following assumptions:

- All work will be conducted from the roadway.
- Mitigation measure will reduce impacts to below the level of significance.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Special Considerations

Visual Quality

The grouping of mature redwoods located on the west side of the highway between Clear Creek and the bus stop (PM 11.39) and identified for removal is potentially a scenic resource. Since no pedestrian improvements are planned at Clear Creek, there does not seem to be justification for removing these trees. The mature redwood across the highway is also potentially a scenic resource; consider measures to retain this tree.

Biological

Work in the vicinity of Clear Creek Bridge could trigger consultations and/or permits if it encroached on jurisdictional areas (i.e. beyond top of bank).

Need and purpose

The proposed work does not appear to fully meet the need and purpose. The lack of shoulders through Brookdale does not address the identified need for bicycle facilities, and the pedestrian facilities stop at Clear Creek, perpetuating the disconnection between lodging and the nearest bus stop. This brings up the question of whether this segment has logical termini, and could cause issues with segmentation, depending on long-term plans.

At Irwin Way, the proposed left-turn lane, while improving the situation for cyclists by eliminating the need for southbound vehicles to drive on the shoulder, is an unconventional solution to a deficiency in bicycle facilities. The benefit appears to be

for vehicular traffic with no supporting need, while the benefit to cyclists is coincidental and limited. The proposed work provides little benefit for pedestrians other than a wider shoulder (shared with cyclists.)

Considering the long gap between sections within this segment and the proposed work, it is unclear that they have the same need or that they belong united. Alternatives to the current proposal should be considered, both to reduce impacts and to better meet the need and purpose. Within Brookdale, consider developing a multi-use trail in place of the sidewalk, both to provide a bicycle facility and to reduce impacts. At Irwin Way, consider a proposal that would meet the need for cyclists while reducing impacts that would occur from an additional lane, such as a specific bike facility.

Segment 5

Boulder Creek: River St to Bear Creek Rd PM 12.45/13.23

Purpose

- Improve visibility of crossing pedestrians.
- Improve pedestrian and bicycle access.
- Provide safe mobility for all users at Bear Creek Road intersection.

Need

- Deficient pedestrian and bicycle facilities along commercial corridor.
- Lack of multimodal accommodation at Bear Creek Road intersection.

Description of Work

Widen highway to provide 4-foot shoulders; convert eastside sidewalk on Boulder Creek Bridge to accommodate 4-foot shoulders and realign lanes; construct 6-foot-wide sidewalk on both sides from PM 12.77 (Mountain St) to PM 13.1 (Haven Ln), continuing on the west side from PM 13.1 (Haven Ln) to about PM 13.23 (Bear Creek Rd), where it transitions to a multi-use path to the end of the project; construct raised medians in downtown Boulder Creek; and delineate crosswalks. Substantial excavation of cut slope and vegetation removal on the west side will be required from the PM 13.16 (W Park Ave) to the end of the project; substantial fill will be required from PM 13.31 to the end of the project.

Anticipated Environmental Approval

CEQA	(choose	one)	÷
	000000	00,	•

Exemption

Statutory	Categorical	Common Sense
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☐ Initial Study with Mitigated ND

Environmental Impact Report

NEPA (choose one):

- Categorical Exclusion
- Environmental Assessment with Finding of No Significant Impact

Routine Complex

Environmental Impact Statement

PSR Summary Statement

(This section, preceded by the paragraph under General, must be copied into the PSR.)

The proposed design does not clearly meet the defined need and purpose, therefore design changes at PA&ED can be expected. For the purposes of preliminary review, the anticipated environmental documentation would be an Initial Study with Mitigated ND under CEQA and a Categorical Exclusion under NEPA. The work proposed at Bear

Creek Road does not fall into a CE category under CEQA. Furthermore, the project would result in potentially significant impacts to the corridor character from urbanizing features, and to visual quality from wider pavement, canopy clearing, loss of scenic resources, and substantial loss of mature trees and heavy vegetation. The project would require R/W acquisitions of private property for the new left-turn lane, including private recreational areas. Alternatives to reduce these impacts must be considered. The document can be expected to take up to 24 months to complete.

There is a low-to-moderate risk that an EIR could be required if it appears adequate mitigation cannot be incorporated or if cumulative impacts are determined to be significant. Revising the document type to an EIR from an IS could add 1 to 3 months to the 0 phase in order to conduct early coordination under CEQA. The risk to the schedule can be minimized if this determination is made early during PA&ED so that the process can be initiated as soon as possible and occur simultaneously with environmental studies.

This determination was based on the following assumptions:

- All work will be conducted from the roadway.
- Mitigation measure will reduce impacts to below the level of significance.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Special Considerations

Visual Quality

There are several elements that would need to be evaluated as scenic resources. This includes street trees, in particular on the east side of the highway at PM 12.67, and a stacked stone wall at PM 12.85. Plans don't show excavation or fill conforming--- impacts will extend beyond the identified postmile limits.

Cultural Resources

A stacked stone wall at PM 12.85 and one at PM 13.18 are potentially historic features and will need to be evaluated.

Water Quality

The San Lorenzo River and Boulder Creek are on the 2014/2016 Clean Water Act Section 303(d) list for sedimentation. (The San Lorenzo River is also listed for various other impairments.) In addition, the Central Coast RWQCB set a total maximum daily load (TMDL) for sediment/siltation for the San Lorenzo River watershed, which limits the TMDLs for pollutants. Widening at the north end of the segment is within the San Lorenzo River watershed; that and the work in the vicinity of Boulder Creek could contribute to sedimentation to the respective waterways. Design pollution prevention BMPs could be required to minimize sediment discharge.

Segment 6

North Boulder PM 15.00*/15.42

*Proposed work does not begin until PM 15.07. The corridor between 15.00 and 15.07 was not evaluated.

Purpose

Provide safe mobility for all users to bus stops and Garrahan Park.

Need

Lack of pedestrian or bicycle facilities along SR9 in this segment.

Description of Work

Widen shoulders to 4 feet; pave bus stop(s); construct 6-foot sidewalk on the southbound side of the highway from PM 15.21 (Sequoia Dr) to PM 15.43 (driveway) and for about 80 feet on the northbound side beginning at PM 15.415 (Pool Dr.) Based on preliminary review it appears widening on the northbound side will likely require drainage modifications, including culvert extensions and relocation of a drainage ditch. *No drainage modification was reviewed for this PEAR.*

Anticipated Environmental Approval

· · · · · · · · · · · · · · · · · · ·
CEQA (choose one):
⊠ Exemption
🗌 Statutory 🛛 Categorical 🔲 Common Sense
Initial Study or Focused Initial Study with proposed Negative Declaration (ND) or Mitigated ND
Environmental Impact Report
NEPA (choose one):
🛛 Categorical Exclusion
Environmental Assessment with Finding of No Significant Impact
Routine Complex
Environmental Impact Statement

PSR Summary Statement

(This section, preceded by the paragraph under General, must be copied into the PSR.)

The proposed design does not clearly meet the defined need and purpose nor necessarily have logical termini, therefore design changes at PA&ED are expected. For the purposes of preliminary review, the anticipated environmental documentation is a Categorical Exemption under CEQA and a Categorical Exclusion under NEPA; this would take approximately 14 months to complete. Programming for a CE/CE poses a low risk to the schedule; an Initial Study could be deemed appropriate at PA&ED, mostly due to the urbanization through hardscape and tree and vegetation removal, and

to the chance that permits could be required. Greater clearing, pavement, and sidewalks could be considered out of character for the semi-rural setting and therefore potentially significant. Avoiding the impacts altogether and/or minimizing them with enhancement measures is recommended.

This determination was based on the following assumptions:

- All work will be conducted from the roadway.
- All work can be performed within state R/W and minor TCEs.
- There are no potentially significant impacts.
- No permits or formal biological consultation will be required.
- Section 106 determination will be "no adverse effect."
- The provisions of Section 4(f) will not apply.

Special Considerations

Visual Quality

There is opportunity to improve the bus stop near PM 15.24 as an enhancement measure. Trees planted to provide afternoon shade on the new sidewalk would reduce the visual impact of the additional hardscape. Attention should be given to the decorative stone planter at PM 15.42.

Biology

Widening at the north end of the segment potentially encroaches on the jurisdictional area at Kings Creek. This work could trigger permits, which would preclude the use of a CE under CEQA.

Water Quality

Kings Creek is on the 2014/2016 Clean Water Act Section 303(d) list for sedimentation. Widening at the north end of the segment could contribute to sedimentation; design pollution prevention BMPs could be required to minimize sediment discharge.

Need and Purpose

The limits of the deficiency identified by the need within this segment have not been well defined; this brings into question whether this segment has logical termini, and could cause issues with segmentation, depending on long-term plans. While the northern limits have clearly been defined by the design constraints at Kings Creek Bridge, it is unclear how this specifically relates to the need, since this location is midway between two residential access points. Furthermore, it should be noted that there is no pedestrian refuge along the constrained, sharp curve between PM 15.15 and PM 15.21. For these reasons, the segment could be seen as not meeting the defined purpose.

Disclaimer

This report is not an environmental document or determination. The above information and recommendations are based on the project description provided in this report. The discussion and conclusions provided by this PEAR are approximate and based on a cursory review of existing records, databases, and mapping tools to estimate the potential for probable environmental effects; the statements herein are not a guarantee of Environmental's needs or determinations during PA&ED. The purpose of this report is to provide a preliminary level of environmental analysis to support the project initiation. Changes in project scope, alternatives, existing environmental conditions, environmental laws, or regulations, and/or revelations made during field reviews will require a re-evaluation of this report.

Approval

Lara Bertaina, Environmental Branch Chief

Doug Hessing, Project Manager

6/6/2022

Date

06/06/2022

Date

Attachment F

Proposed Project Summary

Summarize the key needs/improvements from the sections that were completed. Bring this summarized form and the completed Transportation Planning Scoping Information Sheet to the Project Nomination Scoping Team meeting. Make sure to tie these proposed needs and improvements back to <u>Caltrans' Strategic Management Plan goals</u>.

Districts may fill out the information below if it is readily available. The Project Summary Table is optional.

EA	
EFIS	
County-Route-PM	SCR-SR09-PM 4.0-20.827
Project Description	Enhance operational features and improve multi-modal facilities, between Henry Cowell Redwoods (PM 4.0) and HWY 26 N. Jct (20.8).
Project Name: Hwy 9 Multi-	Modal Corridor Improvements

Section 1–System Planning

The SR09 corridor serves as a main street for the towns of Felton, Ben Lomond, Brookdale, and Boulder Creek. SR 09 is located in a mountainous area. On the southeast side of SR09 is San Lorenzo River and on the opposite northwest side is mountain hillside.

Section 2–LD-IGR

Section 3–Smart Mobility, Complete Streets, and Regional Planning

Multimodal infrastructure is limited, some roadway features are not ADA compliant, and communities within the project area are concerned that non-motorized travel is uncomfortable because of high speed vehicles traveling the highway, blind curves, and lack of shoulder space throughout the corridor (see Shoulder Width Map attached). There are no bicycle lanes, but bicyclists are allowed. San Lorenzo Valley High school and lower grade school institutions are combined at (multi-school complex) within one location in the project limits. Pedestrians and bicyclists frequently travel on SR 9 alongside motorists to get to and from the school complex, community centers, recreational facilities, and surrounding neighborhoods. Complete Streets recommendations have been developed in coordination with local partners and derive from the Highway 9 Complete Streets Corridor Plan. The plan documents hours of public engagement and community input. Specific concepts recommended are listed further in the TPSIS document, under the attached document titled PSR-PDS Segmentation. Included with attachment are maps that help identify land uses that explain travel behaviors of residents and reasoning for complete streets implementation.

Transportation Planning Scoping Information Sheet Section 4–Climate Change and Environmental Considerations

Section 5–Tribal Government Coordination

Project Nomination Scoping Team Information			
Title	Name	Phone Number	
District Information Sheet Point of	Kelly McClendon	805-549-3510	
Contact			
Project Nomination Coordinator	Kelly McClain	805-549-3278	
Transportation Planning Project			
Nomination Scoping Team	Kelly McClendon	805-549-3510	
Representative			

Transportation Planning Stakeholder Information			
Title	Name	Phone Number	
Regional Planner	Gustavo Alfaro	805-549-3443	
System Planner	Kelly Mcclendon	805-549-3510	
Local Development	Christopher Bjornstad	805-549-3157	
Intergovernmental Review (LD-IGR)			
Planner			
Sustainable Planning Grant	Hana Mengsteab	805-549-3130	
Coordinator			
Goods Movement Planner	Gustavo Alfaro	805-549-3443	
Transit Planner	Jennifer Calate	805-549-3099	
Bicycle and Pedestrian Coordinator	Gustavo Alfaro	805-549-3077	
Park and Ride Coordinator	Jennifer Calate	805-549-3099	
Native American Liaison	Hana Mengsteab	805-549-3130	
Climate Change Coordinator/Liaison	Jenna Schudson	805-549-3432	
Other Coordinators			

Reviewed by:

8/31/2021 Justavo Alfaro

District Planning Representative (Date) (Date)

Project Nomination Coordinator

It is recognized that not every proposed project will require each section in the Transportation Planning Scoping Information Sheet to be filled out.

Section 1: System Planning

ROUTE SEGMENT AND PROJECT INFORMATION					
Co/ Rte /P.M. Project Description					
Choose Anchor Asset	SCR/09/4.0 - 20.827				
Planned/Programmed					
Project					
Planned/Programmed					
Project					
Planned/Programmed					
Project					

ROUTE DESIGNATIONS				
	N/A- Minor	Scenic Highway	Eligible	
rieeway and expressway	Arterial			
		Truck Network	Advisory KPRA	
		Designation	over 30 ft. not	
National Highway System	N/A		advised-	
			California Legal	
			Advisory Route	
Strategic Highway Notwor		Interregional Road	Yes, partially.	
	K N/A	System		
Federal Function	al Dringinle Arterial	Strategic Interregional	N/A	
Classification	Finciple Artendi	Corridor		
Other	Facility type:	Priority Interregional	N/A	
Olliei	Conventional	Facility		

Α	DT		V/C			Speeds			
Base	Horizo								
Year	n Year	Bas	e Year 2013	H	orizon Year	Bas	e Year 2013	н	orizon Year
2013	2040		0.410		2040		40		2040
54,500	/4,300	NB	0.412	NB	.5/6	NB	48	NB	48
-	-	SB	0.761	SB	1.009	SB	38	SB	28
55,000	75,700								
Truck Vo	olumes:				Truck Perce	entage	s: 2-6%		
Please describe how the project will impact modal and intermodal facilities: Bicycle access and some bus facilities exist around the area.									
Please identify if the project is consistent with the following documents:									
⊠ Transp Report (oortation (ICR)	Conce	ept 🗆 Di Man	 District System Corridor System Management Plan (DSMP) Management Plan (CSMP) 					
□ Interre Strategio	egional Tr c Plan (ITS	anspo P)	ortation 🗆 Co Plan	ion 🗆 California Freight Mobility Plan (CFMP)					
 Other (Feasibility Study, District Bike and Ped Plan, Regional Concept of Transportation Operations etc): 									

Section 2: Local Development – Intergovernmental Review

LD-IGR				
Please provide the below LD-IGR information (if a	vailable) for any proposed local projects that			
may impact, directly or indirectly, the project. Describe the land uses along the segment.				
Identify major sites, destinations and trip generators within or adjacent to the corridor. These				
can include: residential parks, recreation center	s, religious institutions, schools, town centers,			
shopping centers, large employment centers and	d so forth.			
Local Agency Name/Project Sponsor: Santa	Phone Number: (831)-460-3200			
Cruz County Regional Transportation	Email: info@sccrtc.org			
Commission				
Project Distance to Development(s)				
California Environmental Quality Act (CEQA)	Consult with District LD-IGR Planner, Chris			
Status and Implementation Date	Bjornstadt. N/A			
National Environmental Policy Act Status				
(required for projects with Federal Funding)				
All vehicular and non-vehicular unmitigated				
impacts and planned mitigation measures				
include Transportation Demand Management				
(TDM) and Transportation System Management				
(TSM) that may affect Caltrans Facilities				
Approved mitigation measures and				
implementing party.				
Value of constructed mitigation and/or amount				
of funds provided.				
Encroachment Permit, Transportation Permit,				
Traffic Management Plan, or California				
Transportation Commission (CTC) Access				
approvals needed				
Describe relationship to Regional Blueprint,				
General Plans, or County Congestion				
Management Plans.				
Inclusion in a Regional Transportation Plan,				
Sustainable Community Strategy, or Alternative				
Planning Strategy?				
What type of regional or local				
mitigation/transportation impact fee program is				
in place?				
Traffic Mitigation Agreement with an agency or				
developer to collect a "Fair Share" to offset				
"nexus and proportionality" traffic impacts to				
the SHS.				

Section 3: Smart Mobility, Complete Streets, and Regional Planning

SMART MOBILITY FRAMEWORK PLACE TYPES						
Identify the SMF	Identify the SMF Place Type(s):					
□ Urban Center	🗆 Close-In Center	🗆 Suburban Center	Rural Settlement/Ag Land			
🗆 Urban Core	🗆 Close-In Corridor	🗆 Suburban Corridor	🖂 Rural Towns			
	Close-In Neighborhood	Suburban Dedicated Use Area	Protected Lands			
	Compact Community	🛛 Neighborhood	🗆 Special Use Areas			

3.1 Pedestrian Conditions

BICYCLE AND PEDESTRIAN CONDITIONS	Needs/Opportunities with Project	Regional/Local Partners Needs
Describe the existing bicycle and pedestrian		
facilities within the project limits (e.g.	Opportunities from the corridor plan were	See total complete streets
bicycle/pedestrian accessibility; Class I, II, III,	explored in partnership with SCCRTC.	concept list from SCCRTC's
IV, signage; shoulder connections, sidewalks,	Several segments and corresponding	Highway 9/San Lorenzo Valley
on/off ramps, crosswalks, curb ramps; and	bike, pedestrian, and transit concepts	Complete Streets Corridor Plan:
bicycle/pedestrian counts etc.) Bicycles are	were developed. Potentially feasible	https://sccrtc.org/projects/streets-
allowed but there are no existing bicycle and	concepts are moving forward into the	highways/hwy-9-plan/
pedestrian facilities	project and will be studied further study in	
Describe the physical and/or perceived	PAED.	
impediments for bicyclists and pedestrians		
Shoulders are predominately less than 8 feet	Any bike and pedestrian concepts that	
(See Shoulder Width Map). SR 9 is a narrow	cannot be implemented by Caltrans on	
roadway, connectivity gaps in sidewalks,	SR 9, SCCRIC with local partners can	
limited curbs, non-ADA compliant facilities	pursue funding and implementation	
exist in the corridor. There is no formal bike	through the PSR-PDS (EA 05-1M550).	
classification and bicyclists often share the	Please see attached PSR-PDS	
road surface with motorists.	segmentation at the end of this	
Does the highway segment function as a	aocument.	
Main Street: or a "Safe Route to School ?	Noto: All now bike lange are	
the towns of Folton Ron Lomand Brookdale	recommended to have striping and/or	
and Boulder Crock	signage indicating transitions from Class II	
Describe the bicycle and pedestrian peeds	to Class III bike routes and indicating	
as identified in an existing Bicycle/Pedestrian	beginning/ending routes	
Plan or comprehensive planning study for the		
corridor if any Needs are described in		
project priority list originating from the		
Highway 9 San Lorenzo Valley Complete		
Streets Corridor Plan. This plan was funded by		
a Caltrans grant. See attached.		
If applicable, is the Pedestrian Plan or	1	
comprehensive planning study included in		
the ADA Transition Plan? N/A		

-
Is the proposed project located on a corridor
that accommodates or bisect recreational
trails
Yes, Bia Basin Redwoods State Park and
Henry Cowell State Park
Contact information for bicycle, pedestrian or
disabled advisory advocates
disabled davisory davocales.
SCCRIC Transportation Planners
Grace Blakeslee -831-462-3200
Cory Caletti-SCCRTC-831-460-3201
CCaletti@sccrtc.org

3.3 Transit Conditions

TRANSIT CONDITIONS	Needs/Opportunities with Project	Regional/Local Partner Needs
What are the existing transit accommodations, if		
any? (e.g., such as bus stops or active transit line)	Multiple transit improvements (bus	See total complete streets
The SLV is served by three public bus routes, school	pads) are proposed in	concept list from SCCRTC's
buses, as well as paratransit services for seniors and	coordination with local partners	Highway 9/San Lorenzo Valley
people with disabilities offered by Santa Cruz METRO	and community planning efforts.	Complete Streets Corridor Plan:
and Community Bridges Lift Line. Santa Cruz	See PSR-PDS Segmentation page	https://sccrtc.org/projects/streets-
METRO's three bus routes have an average monthly	towards the end of this document.	highways/hwy-9-plan/
ridership of approximately 40,000. Santa Cruz Metro		
has route 17 Express going from Santa Cruz to Scotts		
Valley, route 35A going from Santa Cruz to Scotts		
Valley to Redwood Grove or Boulder Creek, route		
35/35A going from Santa Cruz to Scotts Valley to		
San Lorenzo Valley.		
Are there existing transit or proposed		
accommodations on intersecting local roadways?		
N/A		
Where is the nearest Park and Ride Lot? Who		
owns/maintains?		
There are two park and ride lots, Scotts Valley transit		
center a mile from the Mt. Hermon Rd exit managed		
by Santa Cruz Metro, off the Summit Rd exit and		
Pasatiempo exits owned by Caltrans.		

TRANSIT CONDITIONS	Needs/Opportunities with Project	Regional/Local Partner Needs
Describe transit facility needs identified in short-and		
long-range transit plans and RTP. Describe how		
these future plans relate to the corridor. See SCCRTC		
total project priority list attached.		
Contact information for local transit provider.		
Pete Rasmussen, SC Metro 831) 426-6080		

3.4 Local and Regional Planning

LOCAL AND REGIONAL PLANNING	Additional Needs/Opportunities with Project
MPO/RTPA and Contact Name:	
Brianna Goodman, Transportation Planner	
Rachel Moriconi, Transportation Planner	
(831) 460-3200	
Local County/City and Contact Name:	
County of Santa Cruz	
Steven B. Wiesner, P.E.	
Assistant Director of Public Works	
Steve.Wiesner@santacruzcounty.us	
Title and web-link to most current Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS) https://sccrtc.org/funding-planning/long-range-plans/rtp/	
Title and web-link to most current General Plan.	
http://www.sccoplanning.com/PlanningHome/SustainabilityPlanning/GeneralPlan.aspx	
Provide nexus between the RTP objectives and the proposed project to establish the	
basis for the project purpose and need.	
The goals of the RTP are: 1. Establish livable communities that improve people's access	
to jobs, schools, recreation, healthy lifestyles and other regular needs in ways that	
improve health, reduce pollution and retain money in the local economy. 2: Reduce	
transportation related tatalities and injuries for all transportation modes. 3: Deliver	
access and safety improvements cost effectively, within available revenues, equitably	
and responsive to the needs of all users of the transportation system and beneficially for	
the natural environment. All three goals correlate to the needs of SRU9 SLV and	
therefore connect to the project purpose/heed.	

Section 4: Climate Change and Environmental Considerations

CLIMATE CHANGE AND ENVIRONMENTAL CONSIDERATIONS				
Is there an adopted Climate Action Plan for the City of County				
in which the proposed project is located?				
Is the corridor susceptibility to climate change factors such as	🗆 Sea Level Rise/Storm Surge 🛛 Temperature Changes			
increased flooding or sea level rise? If yes, please indicate which factors to the right.	☑ Precipitation ☑ Wildfire			
Is there a local and/or regional climate vulnerability	🛛 Yes			
assessment or adaptation plan? Please provide link and/or further information.	□ No			
	As of August 2019 Caltrans, District 5 is in the process of developing a Vulnerability Assessment that encompasses this location. Anticipated completion is early 2020.			
Describe assets vulnerable to changes in climate conditions, such as landscape planting, irrigation systems.	Landscape planting, roadways.			
Does the proposed project include GHG measures from the Regional RTP/SCS's Environmental Impact Report (EIR)? Consult with District LD-IGR Planner, Jenna Schudson.				
Is the proposed project located on or near and of the following: sensitive habitat areas such as wetlands, native or sensitive species habitats, wildlife corridors, identified fish passage barrier, agricultural land?	Critical Habitat: Steelhead, Scotts Valley Polygonum			

AIR QUALITY MANAGEMENT				
Name of Air Quality Management District (AQMD)				
Monterey Bay Unified APCD				
Is the proposed project located in a Federal non-attainment or attainment	\boxtimes	□ No		
maintenance area?	Yes	The following are the federal		
		classifications: Ozone		
		Unclassified/Attain.		

Carbon Monoxide
Unclassified/Attain. Nitrogen Dioxide
Unclassified/Attain.
Sulfur Dioxide Attainment
Particulate Matter (10)
Unclassified/Attain. Lead
Unclassified/Attain

Section 5: Tribal Government Coordination

TRIBAL GOVERNMENT COORDINATION	
Is the proposed project within or near an Indian Reservation Rancheria, or Tribal Trust Land?	 □ Yes (Please provide name/names) ☑ No
Does the proposed project involve trust lands (including tribal and individual allotted lands) outside of a reservation or Rancheria?	 □ Yes (Please provide name/names) ☑ No
You may skip the following three questions below only if both questions above have been checked no.	
 Has the Tribe or individual allotment holders been notified? 	 Yes (Describe concerns/topics discussed) No (Why not?)
 Has the Bureau of Indian Affairs (BIA) been notified (if trust lands and/or a Reservation/Rancheria is involved)? 	 ☐ Yes (Describe concerns/topics discussed) ☐ No (Why not?)
 Have all applicable tribal laws and regulations been reviewed for required coordination? 	□ Yes □ No
Is there an AB 52 letter on file from a Native American Tribe that would affect this project?	 ☐ Yes (Please provide Tribal name(s) and letter details). ☐ No
Has the Tribal Government been contacted?	 Yes (Describe concerns/topics discussed) No (Why not)
Does the Tribe have a Tribal Employment Rights Office/Ordinance (TERO)?	□ Yes □ No
 Has the TERO been reviewed for required coordination? 	□ Yes □ No
 Is there a related Memorandum of Understanding (MOU) between the District and the Tribe? 	□ Yes □ No
Does Caltrans have other MOUs with the Tribe?	 Yes (Provide title and description or content) No

SHOULDER WIDTH MAP



PSR-PDS Segmentation

Segment 1. Felton: Henry Cowell State Park to Graham Hill Rd, (PM 4 to 6.46) For SHOPP Project 05-1K890 (Felton CAPM), between (PM 0.05/7.50), Caltrans is pursuing implementation of sidewalks, Class II bike lane (Class II requires striping parking improvements to make room for Class II bike lanes), new curb extensions, and enhanced crosswalks. See CSDD and project report for specific complete streets concepts included within the project limits.

For SHOPP Project 05-1M400 (Safety Project), between (PM 6.30/7.20), pedestrian facilities will be improved by including pedestrian gap closures, crossings, and new sidewalks. Other complete streets elements to be considered include enhanced crosswalk visibility and upgraded bus stop facilities. Pedestrian facilities can also be enhanced by including streetscape elements such as benches and lighting to further promote a more pedestrian friendly experience. Bicycle mobility can be improved by including striping and signage to clearly indicate the Class III Bike Route that exists within the project's limits. Any proposed project improvements will consider cyclists as users of the state highway system.

Improvements within this segment address will accomplish the following:

- Increase multimodal accommodation at commuter routes/major arterial intersections with SR 9.
- Add pedestrian and bicycle facilities along commercial corridor and promote active transportation for nearby neighborhoods.
- Enhance pedestrian and bicycle connectivity from the high-density commercial town center to the entrance of Henry Cowell State Park.



Segment 1 Map- Land Use

Segment 2. Schools: Graham Hill Rd to Glen Arbor N, (PM 6.46 to 8.115)

This segment includes a Class III bike route on the Northbound (NB) and southbound (SB) side of the highway starting at the southern end of the school complex entrance. The Class III bike route on the SB side ends at El Soyo Heights Drive (PM 7.5) at the northern end of the segment. Class III bike route on the NB side continues until ending at Brackney Road (PM 7.8). Class III bike route begins again on the SB side of the highway near Sunny Croft Road (PM 7.97) until ending at Glen Arbor Road (PM 8.11).

For pedestrian mobility, sidewalks are proposed at the school complex most southern driveway, SB side, at a spot location. New sidewalks on the SB side are proposed to begin again at El Soyo Heights Drive. A new sidewalk on the NB side starts at Sunny Croft Road and conditions maintain until Glen Arbor Road. To improve pedestrian access to transit, a bus pad and sidewalk on the SB side are proposed just south of El Soyo Heights Drive.

The SLV school complex circulation project was added to the scope 05-1M550 for SCCRTC and local partners to pursue funding to address congested traffic conditions during school days.

Improvements within this segment address will accomplish the following:

- Increase pedestrian and bicycle facilities from the high-density commercial town center and nearby neighborhoods to the SLV Schools Complex entrance along SR9.
- Improve circulation at the SLV school complex.



Segment 2 Map- Land Use

Segment 3. Ben Lomond: Highland Park to Jacobson Ln, (PM 8.492 to 10.062) Segment 3 includes a new bike and pedestrian path at the Holiday Lane (PM 8.492) entrance on the NB side starting at the Highland Park entrance road. A bus stop and sidewalk improvements are proposed on both the NB and SB side. The Bike and ped path continue northerly and ends at Shadow Brook Road (PM 8.81).

The NB bike and pedestrian path begins again at just north of Woodland Drive (PM 9.13) and ends at Miles Street (PM 9.29). From Miles Street, nearing the town center, NB/SB Class III route including sidewalks begins. Class III transitions to Class II at Brookside Avenue (PM 9.38). Class II and sidewalks continue until the northern Mill Street intersection (PM 9.64). Class II changes back to Class III bike route. Sidewalks end at Marshall Creek Court (PM 9.78). An existing 4' sidewalk on the NB side begins at Marshall Creek Court and ends at Brown Gable Road (PM 9.95). Class III bike route ends at Jacobson Lane (PM 10.06).

Improvements within this segment will accomplish the following:

 Increase multimodal facilities from a recreational facility entrance (Highland County Park) to the high-density commercial center.



Segment 3 Map- Land Use

Segment 4. Brookdale: Western Dr to Irwin Wy, (PM 11.123 to 12.18)

Segment 4 provides sidewalk on NB/SB side at Western Ave (PM 11.13) and continues northerly. A new transit bus pad is proposed (PM 11.15) on the SB side. A Bike and ped path on the NB side is proposed at Alameda Avenue (PM 11.3) and ends at Cascada Street (PM 11.35). Sidewalks end at Pacific Street (PM 11.42). A new transit bus pad (PM 11.4) on the SB side is proposed. Roadway widening to add in left turn channelization for SB side starts at (PM11.94) and ends at (PM12.18).

Improvements within this segment will accomplish the following:

• Increase pedestrian and bicycle facilities for dense neighborhoods within this segment.



Segment 4 Map- Land Use

Segment 5. Boulder Creek: River St to Bear Creek Rd, (PM 12.45 to 13.239)

Segment 5 proposes NB/SB class III bike routes beginning at River Street (PM 12.45) and continues until (PM 12.48) where Class III transitions to Class II bike route. Class II bike route transitions back to Class III at Middleton Avenue (PM 13.09). Class III on the SB side bike route transitions to a Bike and Pedestrian Path at approximately Bear Creek Road (PM 13.24). The NB side remains class III and ends at (PM 13.34).

Proposed NB/SB sidewalks begin at Mountain Street (PM 12.77), with the NB side ending at just north of Middleton Avenue (PM 13.1). The SB sidewalk loosely ends at Bear Creek Road.

Improvements within this segment will accomplish the following:

- Increase pedestrian and bicycle facilities along a dense commercial corridor and improve connectivity to town center amenities.
- Enhance multimodal accommodation at commuter routes/major arterial intersections with SR 9.
- Improve visibility of crossing pedestrians.
- Improve pedestrian and bicycle access to Boulder Creek Elementary.
- Provide safe mobility for all users at Bear Creek Rd.



Segment 5 Map- Land Use
Transportation Planning Scoping Information Sheet

Segment 6. North of Boulder Creek: Pleasant Way to Pool Dr, (PM 15.084 to 15.422)

Segment 6 proposes a transit bus pad improvement on the SB side at Riverside Drive (PM 15.08) and Sequoia Road (PM 15.21). NB/SB class III bike routes also begin at (PM 15.21), including SB sidewalks. Just north of Kings Creek Road (PM 15.35) a spot location improvement is proposed that includes a new crosswalk, sidewalk, and bulb out. At Pool Drive (PM 15.42), the project includes a proposed new crosswalk across SR 9 for residents walking to the adjacent market store. A NB sidewalk begins at Pool Drive and ends at (PM15.43). Both the NB/SB bike lanes end at (PM 15.46).

Improvements within this segment will accomplish the following:

• Provide safe mobility for all users to bus stops, market store, and Garrahan Park.



Figure 1 Segment 6 Map- Land Use

Attachment G

STATE OF CALIFORNIA

CALIFORNIA STATE TRANSPORTATION AGENCY

Memorandum

To: Doug Hessing

Attn: Claudia Espino

 Date:
 4/22/2022

 File:
 CD
 05
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 9

DESCRIPTION:

Multimodal travel circulation, bicycle and pedestrian connections, Segment 2

From: Division of Right of Way Central Region

Department of Transportation

Subject: RIGHT OF WAY DATA SHEET

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 12/14/2021

The following assumptions and limiting conditions were identified:

Parcels

Temporary Construction Easements based on M410 of 5/12/25 and M600 of 12/2/26 totaling 1.56 years (19 months). Permanent Easements calculated at 90% of Fee value. Datasheet request indicated a lack of environmental concern in the area, if any mitigation sites are needed this could increase the R/W requirements. Any increase or decrease in r/w requirements will render this estimate obsolete. No Improvements appear affected, although detailed maps were not provided. 21 Parcels below Nominal amount, Nominal amount (\$2,500) utilized for estimate purposes. Easement Costs include approximately \$28,000 for Incentive Program.

Utility

The Project Engineer states on the Right of Way Data Sheet Request Form that a Utility permit search has been completed, utility involvement and/or relocation is required, potholing is required with an estimate of 22 holes, and verifications are necessary. Once utility verification maps have been provided and Pos-Loc has been completed, it will become possible to determine the full extent of any utility involvements on this project. Avoid and protect in place all existing, unaffected, buried, and aerial utility facilities in the project area. Comply with USA alert requirements, including at construction sign locations.

Right of Way Lead Time will require a minimum 22 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.

Recommended for approval by:

Martin Miller

MARTIN MILLER Senior Right of Way Agent (805)549-3577 EA: 05-1M550 ALT: 1 Seg 2

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels, etc.):

This Project is a multi-modal corridor improvement project and this Segment will have 34 acquisition areas on 25 parcels by way of Temporary Construction Easements (TCE) and Permanent Easement (some parcels have two). The parcels include both residential and commercial uses of varying capacities. No apparent improvements within the easement areas or appear to be affected by construction in the manner proposed.

General Description of Utility Involvement:

Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

General Description of Railroad Involvement:

No RR facilities affected.

ALT: 1 Seg 2

Revised Date:

0 R/W LEAD TIME/Mo.

Right Of Way Cost Estimate	Current Year	Contingency Rate	Escalation Rate	Escalated Year
	2021	25%	5%	2024
Acquisition:	\$181,250			\$209,820
Mitigation:	\$0	25%	5%	\$0
State Share of Utilities:	\$866,250	25%	5%	\$1,002,793
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$0	25%	5%	\$0
Demolition and Clearance:	\$0	25%	5%	\$0
Title and Escrow:	\$29,156	25%	5%	\$33,752
Ad Signs:	\$0	25%	5%	\$0
Total Current Value:	\$1,076,656			\$1,246,364

If RW Cost Est fields are blank, Costs = \$0

NOTE: above estimate includes reilroad engineering in the amount of:	¢0 00
NOTE. above estimate includes railroad engineering in the amount of.	DO.OO

Estimated Construction Contract Work (CCW):

Estimated Pothole Date 4/22/2025

		Parcel	Data	
Pot Hole	33,000	# of Parcel Type X:	0	
# Pot Holes	22	# of Parcel Type A: less than \$10,000 non-complex	15	
Mitigation	0	# of Parcel Type B: more than \$10,000 non-complex	10	
Bank Permit Fees	0 0	# of Parcel Type C: complex, special valuation	0	
Parcel Area	07040	# of Parcel Type D:	0	# of Duals Needed: 0
Total Excess Area:	37810	Totals:	25	Totals: 0
		# of Excess Parcels:	0	

of Excess Parcels:

22

Misc R/W Work

# of RAP Displacements:	0
# of Clearance/Demos:	0
# of Const Permits:	0
# of Condemnations:	0

Utilities

- <u>2</u> Companies to be potholed
- 7 Companies for Verification
- 2 Companies for Utility Relocations
- JUA/CCUAs are not needed

RR Involvement

Railroad Facilities or Right of Way Affected?	No
Const/Maint Agreement:	No
Service Contract Count:	0
Right of Entry:	No
Clauses:	No
Estimated Lead-time:	0 mos.

Is there a significant effect on	assessed valuation:	No				
Were any previously unidentifi	us waste o	or material	found	d: No		
Are RAP displacements requir	ed: No					
# of single family: 0 # of mu	ıliti-family: 0 # of	business/r	nonprofit:	0	# of farms:	0
Sufficient replacement housing	g will be available with	nout last re	sort housi	ng:	NA	
Are material borrow or dispose	al sites required:	No		L		
Are there potential relinquishm	ts: N	lo				
Are there any existing or potential airspace sites:			lo			
Are environmental mitigation parcels required:			lo			
Data for evaluation provided b	y:					
Estimator: David Adams			1	2/16/	2021	
Railroad Liaison Agent: Patrick Mason			1	2/20/	2021	
Utility Relocation Coordinator: Landon Nagata			-	2/17/	2021	

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

Martin Miller

for Marshall Garcia

MARSHALL GARCIA Office Chief, Central Region Right of Way

Date ENTERED PMCS BY: STATE OF CALIFORNIA

CALIFORNIA STATE TRANSPORTATION AGENCY

Memorandum

To: Doug Hessing

Attn: Claudia Espino

Joseph Salazar

From: Department of Transportation

Division of Right of Way Central Region

Subject: RIGHT OF WAY DATA SHEET

Date: 4/22/2022 File: CD 05 EA 1M550 Alt 1 Seg 3 Co SCr RTE 9

DESCRIPTION:

Multimodal travel circulation, bicycle and pedestrian connections, Segment 3

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 12/14/2021

The following assumptions and limiting conditions were identified:

Parcels

Temporary Construction Easements based on M410 of 5/12/25 and M600 of 12/2/26 totaling 1.56 years (19 months). Permanent Easements calculated at 90% of Fee value. Datasheet request indicated a lack of environmental concern in the area, if any mitigation sites are needed this could increase the R/W requirements. Any increase or decrease in r/w requirements will render this estimate obsolete. No Improvements appear affected, although detailed maps were not provided. 17 Parcels below Nominal amount, Nominal amount (\$2,500) utilized for estimate purposes. Easement Costs include approximately \$20,000 for Incentive Program.

Utility

The Project Engineer states on the Right of Way Data Sheet Request Form that a Utility permit search has been completed, utility involvement and/or relocation is required, potholing is required with an estimate of 110 holes, and verifications are necessary. Once utility verification maps have been provided and Pos-Loc has been completed, it will become possible to determine the full extent of any utility involvements on this project. Avoid and protect in place all existing, unaffected, buried, and aerial utility facilities in the project area. Comply with USA alert requirements, including at construction sign locations.

Right of Way Lead Time will require a minimum 22 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.

Recommended for approval by:

Martin Miller

MARTIN MILLER Senior Right of Way Agent (805)549-3577 EA: 05-1M550 ALT: 1 Seg 3

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels, etc.):

This Project is a multi-modal corridor improvement project and this Segment will have 23 acquisition areas on 20 parcels by way of Temporary Construction Easements (TCE) and Permanent Easement (some parcels have both). The parcels include both residential and commercial uses of varying capacities. No apparent improvements within the easement areas or appear to be affected by construction in the manner proposed.

General Description of Utility Involvement:

Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

General Description of Railroad Involvement:

No RR facilities affected.

ALT: 1 Seg 3

Revised Date:

0 R/W LEAD TIME/Mo.

Right Of Way Cost Estimate	Current Year	Contingency Rate	Escalation Rate	Escalated Year
	2021	25%	5%	2024
Acquisition:	\$93,750			\$108,527
Mitigation:	\$0	25%	5%	\$0
State Share of Utilities:	\$1,043,750	25%	5%	\$1,208,271
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$0	25%	5%	\$0
Demolition and Clearance:	\$0	25%	5%	\$0
Title and Escrow:	\$22,813	25%	5%	\$26,408
Ad Signs:	\$0	25%	5%	\$0
Total Current Value:	\$1,160,313			\$1,343,207

If RW Cost Est fields are blank, Costs = \$0

NOTE: above estimate includes railroad engineering in the amount of:	\$0.00
NOTE. above estimate includes railload engineering in the amount of.	DO.OO

Estimated Construction Contract Work (CCW):

Estimated Pothole Date 4/22/2025

Cost Break I	Down	Parcel	Data	
Pot Hole	165,000	# of Parcel Type X:	0	
# Pot Holes	110	# of Parcel Type A: less than \$10,000 non-complex	11	
Mitigation	n 0	# of Parcel Type B: more than \$10,000 non-complex	9	
Bank Permit Fees	0	# of Parcel Type C: complex, special valuation	0	
Parcel Are	а	# of Parcel Type D:	0	# of Duals Needed: 0
otal R/W Required:	11189	most complex/time consuming	0	
Total Excess Area:	0	Totals:	20	Totals: 0
		# of Excess Parcels:	0	

of Excess Parcels:

22

Misc R/W Work

# of RAP Displacements:	0
# of Clearance/Demos:	0
# of Const Permits:	0
# of Condemnations:	0

Utilities

- <u>11</u> Companies to be potholed
- 7 Companies for Verification
- 3 Companies for Utility Relocations
- JUA/CCUAs are not needed

RR Involvement

Railroad Facilities or Right of Way Affected?	No
Const/Maint Agreement:	No
Service Contract Count:	0
Right of Entry:	No
Clauses:	No
Estimated Lead-time:	0 mos.

Is there a significant effect on	No					
Were any previously unidentifi	us waste d	or material	foun	d: No		
Are RAP displacements requir	ed: No					I
# of single family: 0 # of mu	ıliti-family: 0 # of	business/r	nonprofit:	0	# of farms:	0
Sufficient replacement housing	g will be available with	nout last re	sort housi	ing:	NA	
Are material borrow or disposa	al sites required:	No				
Are there potential relinquishments or abandonments: No						
Are there any existing or potential airspace sites:			lo			
Are environmental mitigation parcels required:			lo			
Data for evaluation provided b	y:					
Estimator: David Adams				12/16/	/2021	
Railroad Liaison Agent: Patrick Mason				12/14/	/2021	
Utility Relocation Coordinator: Landon Nagata			-	12/17/	/2021	

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

Date ENTERED PMCS BY: Liz Valadez Martin Miller

for Marshall Garcia

MARSHALL GARCIA Office Chief, Central Region Right of Way STATE OF CALIFORNIA

CALIFORNIA STATE TRANSPORTATION AGENCY

Memorandum

To: Doug Hessing

Attn: Claudia Espino

Joseph Salazar

From: Department of Transportation

Division of Right of Way Central Region

Subject: RIGHT OF WAY DATA SHEET

Date: 4/22/2022 File: CD 05 EA1M550 Alt 1 Seg 4 Co SCr RTE 9

DESCRIPTION:

Multimodal travel circulation, bicycle and pedestrian connections, Segment 4

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 12/14/2021

The following assumptions and limiting conditions were identified:

Parcels

Temporary Construction Easements based on M410 of 5/12/25 and M600 of 12/2/26 totaling 1.56 years (19 months). Permanent Easements calculated at 90% of Fee value. Datasheet request indicated a lack of environmental concern in the area, if any mitigation sites are needed this could increase the R/W requirements. Any increase or decrease in r/w requirements will render this estimate obsolete. No Improvements appear affected, although detailed maps were not provided. 8 Parcels below Nominal amount, Nominal amount (\$2,500) utilized for estimate purposes. Easement Costs include approximately \$27,000 for Incentive Program.

Utility

The Project Engineer states on the Right of Way Data Sheet Request Form that a Utility permit search has been completed, utility involvement and/or relocation is required, potholing is required with an estimate of 30 holes, and verifications are necessary. Once utility verification maps have been provided and Pos-Loc has been completed, it will become possible to determine the full extent of any utility involvements on this project. Avoid and protect in place all existing, unaffected, buried, and aerial utility facilities in the project area. Comply with USA alert requirements, including at construction sign locations.

Right of Way Lead Time will require a minimum 22 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.

Recommended for approval by:

Martin Miller

MARTIN MILLER Senior Right of Way Agent (805)549-3577 EA: 05-1M550 ALT: 1 Seg 4

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels, etc.):

This Project is a multi-modal corridor improvement project and this Segment will have 27 acquisition areas on 24 parcels by way of Temporary Construction Easements (TCE) and Permanent Easement (some parcels have both). The parcels include both residential and commercial uses of varying capacities. No apparent improvements within the easement areas or appear to be affected by construction in the manner proposed.

General Description of Utility Involvement:

Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

General Description of Railroad Involvement:

No RR facilities affected.

ALT: 1 Seg 4

Revised Date:

Right Of Way Cost Estimate	Current Year	Contingency Rate	Escalation Rate	Escalated Year
	2021	25%	5%	2024
Acquisition:	\$237,500			\$274,936
Mitigation:	\$3,073	25%	5%	\$3,557
State Share of Utilities:	\$768,750	25%	5%	\$889,924
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$0	25%	5%	\$0
Demolition and Clearance:	\$0	25%	5%	\$0
Title and Escrow:	\$28,625	25%	5%	\$33,137
Ad Signs:	\$0	25%	5%	\$0
Total Current Value:	\$1,037,948			\$1,201,554

If RW Cost Est fields are blank, Costs = \$0

NOTE	ahove	estimate	includes	railroad	engineering	n in	the amount	of [.]	\$(
NUTE.	above	estimate	includes	rainoau	engineenno	JIII	the amount	01.	Ψ

Estimated Construction Contract Work (CCW):

Estimated Pothole Date 4/22/2025

	1	- ·			
Cost Break D	own	Parcel Data			
Pot Hole	45,000	# of Parcel Type X:	0		
# Pot Holes	30	# of Parcel Type A: less than \$10,000 non-complex	14		
Mitigation	0	# of Parcel Type B: more than \$10,000 non-complex	10		
Bank Permit Fees	0 2,458	# of Parcel Type C: complex, special valuation	0		
Parcel Area	37357	# of Parcel Type D: most complex/time consuming	0	# of Duals Needed: 0	
Total Excess Area:	0	Totals:	24	Totals: 0	
		# of Excess Parcels:	0		

of Excess Parcels:

0.00

0 R/W LEAD TIME/Mo.

22

Misc R/W Work

# of RAP Displacements:	0
# of Clearance/Demos:	0
# of Const Permits:	0
# of Condemnations:	

Utilities

- <u>3</u> Companies to be potholed
- 7 Companies for Verification
- 1 Companies for Utility Relocations
- JUA/CCUAs are not needed

RR Involvement

Railroad Facilities or Right of Way Affected?	No
Const/Maint Agreement:	No
Service Contract Count:	0
Right of Entry:	No
Clauses:	No
Estimated Lead-time:	0 mos.

Is there a significant effect on a	No					
Were any previously unidentified	us waste	or material	l found:	No		
Are RAP displacements requir	ed: No					
# of single family: 0 # of muliti-family: 0 # of business/nonprofit: 0 # of farms:					of farms:	0
Sufficient replacement housing	nout last re	esort hous	ing:	NA		
Are material borrow or disposa						
Are there potential relinquishments or abandonments:			10			
Are there any existing or potential airspace sites:			lo			
Are environmental mitigation parcels required:			lo			
Data for evaluation provided b	y:					
Estimator:	David Adams			12/16/2	021	
Railroad Liaison Agent:	Patrick Mason			12/14/2	021	
Utility Relocation Coordinator:	Landon Nagata			12/17/2	021	

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

Martin Miller for Marshall Garcia

MARSHALL GARCIA Office Chief, Central Region Right of Way

Date ENTERED PMCS BY: Liz Valadez

Page 4 of 4

STATE OF CALIFORNIA

CALIFORNIA STATE TRANSPORTATION AGENCY

Memorandum

To: Doug Hessing

Attn: Claudia Espino

Date: 4/22/2022 File: CD 05 EA 1M550 Alt 1 Seg 5 Co SCr RTE 9

DESCRIPTION:

Multimodal travel circulation, bicycle and pedestrian connections, Segment 5

From: Division of Right of Way Central Region

Department of Transportation

Subject: RIGHT OF WAY DATA SHEET

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 12/14/2021

The following assumptions and limiting conditions were identified:

Parcels

Temporary Construction Easements based on M410 of 5/12/25 and M600 of 12/2/26 totaling 1.56 years (19 months). Permanent Easements calculated at 90% of Fee value. Datasheet request indicated a lack of environmental concern in the area, if any mitigation sites are needed this could increase the R/W requirements. Any increase or decrease in r/w requirements will render this estimate obsolete. No Improvements appear affected, although detailed maps were not provided. 7 Parcels below Nominal amount, Nominal amount (\$2,500) utilized for estimate purposes. Easement Costs include approximately \$20,000 for Incentive Program.

Utility

The Project Engineer states on the Right of Way Data Sheet Request Form that a Utility permit search has been completed, utility involvement and/or relocation is required, potholing is required with an estimate of 50 holes, and verifications are necessary. Once utility verification maps have been provided and Pos-Loc has been completed, it will become possible to determine the full extent of any utility involvements on this project. Avoid and protect in place all existing, unaffected, buried, and aerial utility facilities in the project area. Comply with USA alert requirements, including at construction sign locations.

Right of Way Lead Time will require a minimum 22 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.

Recommended for approval by:

Martin Miller

MARTIN MILLER Senior Right of Way Agent (805)549-3577 EA: 05-1M550 ALT: 1 Seg 5

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels, etc.):

This Project is a multi-modal corridor improvement project and this Segment will have 17 acquisition areas on 12 parcels by way of Temporary Construction Easements (TCE) and Permanent Easement (some parcels have both). The parcels include both residential and commercial uses of varying capacities. No apparent improvements within the TCE areas or appear to be affected by construction in the manner proposed.

General Description of Utility Involvement:

Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

General Description of Railroad Involvement:

No RR facilities. affected.

ALT: 1 Seg 5

Revised Date:

Right Of Way Cost Estimate	Current Year	Contingency Rate	Escalation Rate	Escalated Year
	2021	25%	5%	2024
Acquisition:	\$200,000			\$231,525
Mitigation:	\$3,073	25%	5%	\$3,557
State Share of Utilities:	\$618,750	25%	5%	\$716,280
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$0	25%	5%	\$0
Demolition and Clearance:	\$0	25%	5%	\$0
Title and Escrow:	\$15,125	25%	5%	\$17,509
Ad Signs:	\$0	25%	5%	\$0
Total Current Value:	\$836,948			\$968,871

If RW Cost Est fields are blank, Costs = \$0

NOTE of a sector to be the sector	The sector sector is a sector secto	•
NOTE: above estimate includes railroa	a engineering in the amount of:	\$

00.00

22

0 R/W LEAD TIME/Mo.

Estimated Construction Contract Work (CCW):

Estimated Pothole Date 4/22/2025

		Darcol	Data	
Cost Break D	own		Dala	
Pot Hole	75,000	# of Parcel Type X:	0	
# Pot Holes	50	# of Parcel Type A: less than \$10,000 non-complex	7	
Mitigation		# of Parcol Type P:		
Land	0	more than \$10,000 non-complex	5	
Bank	0	# of Dereel Turne Cu		
Permit Fees	2,458	complex, special valuation	0	
Parcel Area	l	# of Parcel Type D:	0	# of Duals Needed: 0
Total R/W Required:	10228	most complex/time consuming	0	
Total Excess Area:	0	Totals:	12	Totals: 0
		# of Excess Parcels:	0	

of Excess Parcels:

Misc R/W Work

# of RAP Displacements:	0
# of Clearance/Demos:	0
# of Const Permits:	0
# of Condemnations:	0

Utilities

5 Companies to be potholed

6 Companies for Verification

- 2 Companies for Utility Relocations
- JUA/CCUAs are not needed

RR Involvement

Railroad Facilities or Right of Way Affected?	No
Const/Maint Agreement:	No
Service Contract Count:	0
Right of Entry:	No
Clauses:	No
Estimated Lead-time:	0 mos.

Is there a significant effect on a	No					
Were any previously unidentified	ous waste	or materia	I found:	No		
Are RAP displacements requir	ed: No					
# of single family: 0 # of mu	liti-family: 0 # of	business	/nonprofit:	0 #	f of farms:	0
Sufficient replacement housing	hout last i	esort hous	ing:	NA		
Are material borrow or disposa	No					
Are there potential relinquishments or abandonments:			No			
Are there any existing or potential airspace sites:			No			
Are environmental mitigation parcels required:			No			
Data for evaluation provided b	y:					
Estimator:	David Adams			12/16/2	021	
Railroad Liaison Agent:	Patrick Mason			12/14/2	021	
Utility Relocation Coordinator:	Landon Nagata			12/17/2	021	

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

Date ENTERED PMCS BY: Liz Valadez Martin Miller for Marshall Garcia

MARSHALL GARCIA Office Chief, Central Region Right of Way STATE OF CALIFORNIA

Memorandum

To: Doug Hessing SLO

Attn: Claudia Espino SLO Date: 4/22/2022 File: CD 05 EA1M550 Alt 1 Seg 6 Co SCr RTE 9

DESCRIPTION:

This project proposed to improve multimodal use of the Route 9 Corridor by widening the road, improve bus stops, installing Class III bike routes and Class II

Subject: RIGHT OF WAY DATA SHEET

Department of Transportation

Division of Right of Way Central Region

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated10/18/2021

The following assumptions and limiting conditions were identified:

Parcels

From:

Two Temporary Construction Easements based on M410 of 5/12/25 and M600 of 12/2/26 totaling 1.56 years (19 months). Datasheet request indicated a lack of environmental concern in the area, if any mitigation sites are needed this could increase the R/W requirements. Any increase or decrease in r/w requirements will render this estimate obsolete. No Improvements appear affected, although detailed maps were not provided. Both Parcels below Nominal amount, Nominal amount (\$2,500) utilized for estimate purposes. Easement Costs include approximately \$2,000 for Incentive Program.

Utility

The Project Engineer states on the Right of Way Data Sheet Request Form that a Utility permit search has been completed, utility involvement and/or relocation is required, potholing is required with an estimate of 10 holes, and verifications are necessary. Once utility verification maps have been provided and Pos-Loc has been completed, it will become possible to determine the full extent of any utility involvements on this project. Avoid and protect in place all existing, unaffected, buried, and aerial utility facilities in the project area. Comply with USA alert requirements, including at construction sign locations.

Right of Way Lead Time will require a minimum 22 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.

Recommended for approval by:

Martin Miller

MARTIN MILLER Senior Right of Way Agent (805)549-3577 EA: 05-1M550 ALT: 1 Seg 6

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels, etc.):

This Project is a multi-modal corridor improvement project and this Segment will impact two parcels by way of Temporary Construction Easements (TCE). The parcels are both zoned for single family residence and are currently being used for that purpose. No apparent improvements within the TCE areas or appear to be affected by construction in the manner proposed.

General Description of Utility Involvement:

Highway 9 is a undivided conventional highway in the project area. This project proposes to improve multi-modal use of the Route 9 Corridor by widening the road, improving bus stops, installing Class III bike routes and Class II bike lanes, installing sidewalks, installing multi-use paths, installing and enhancing crosswalks, and enhancing parking.

General Description of Railroad Involvement:

No RR right of way affected or within the vicinity of the project.

ALT: 1 Seg 6

Revised Date:

0 R/W LEAD TIME/Mo.

Right Of Way Cost Estimate	Current Year	Contingency Rate	Escalation Rate	Escalated Year
	2021	25%	5%	2024
Acquisition:	\$8,750			\$10,129
Mitigation:	\$0	25%	5%	\$0
State Share of Utilities:	\$206,250	25%	5%	\$238,760
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$0	25%	5%	\$0
Demolition and Clearance:	\$0	25%	5%	\$0
Title and Escrow:	\$2,900	25%	5%	\$3,357
Ad Signs:	\$0	25%	5%	\$0
Total Current Value:	\$217,900			\$252,246

If RW Cost Est fields are blank, Costs = \$0

NOTE: above estimate includes railroad engineering in the amount of:	\$0.00
NOTE. above estimate includes railload engineering in the amount of.	DO.OO

Estimated Construction Contract Work (CCW):

Estimated Pothole Date 4/22/2025

Cost Break D	own	Parcel	Parcel Data									
Pot Hole	15,000	# of Parcel Type X:	0									
# Pot Holes	10	# of Parcel Type A: less than \$10,000 non-complex	2									
Mitigation	0	# of Parcel Type B: more than \$10,000 non-complex	0									
Bank Permit Fees	0 0	# of Parcel Type C: complex, special valuation	0									
Parcel Area	l	# of Parcel Type D:	0	# of Duals Needed: 0								
Total R/W Required:	2598	most complex/time consuming	Ū									
Total Excess Area:	0	Totals:	2	Totals: 0								
		# of Excess Parcels:	0									

of Excess Parcels:

22

Misc R/W Work

# of RAP Displacements:	0
# of Clearance/Demos:	0
# of Const Permits:	0
# of Condemnations:	0

Utilities

<u>1</u> Companies to be potholed

5 Companies for Verification

- 2 Companies for Utility Relocations
- JUA/CCUAs are not needed

RR Involvement

Railroad Facilities or Right of Way Affected?	No
Const/Maint Agreement:	No
Service Contract Count:	0
Right of Entry:	No
Clauses:	No
Estimated Lead-time:	0 mos.

Is there a significant effect on	No											
Were any previously unidentified sites with hazardous waste or material found: No												
Are RAP displacements required: No												
# of single family: 0 # of muliti-family: 0 # of business/nonprofit: 0 # of farms:												
Sufficient replacement housing will be available without last resort housing: NA												
Are material borrow or disposal sites required: No												
Are there potential relinquishm	its: N	10										
Are there any existing or poter	Ν	10										
Are environmental mitigation p	arcels required:	Ν	10									
Data for evaluation provided b	y:											
Estimator:	David Adams			12/16/	2021							
Railroad Liaison Agent:	Patrick Mason			10/18/	2021							
Utility Relocation Coordinator:	Landon Nagata			10/25/	2021							

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

Date ENTERED PMCS BY: Martin Miller for Marshall Garcia

MARSHALL GARCIA Office Chief, Central Region Right of Way

Attachment H

RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS) FORM Form PM-0002 (Rev. 04/2022)

The risk register certification is to be approved and signed-off by the **District Deputies** (or their designee) listed below for all scalability levels prior to achieving the below-mentioned milestones. By signing this form, you are certifying that you have reviewed the risks documented in the register and agree that they have been managed to the extent possible by the PDT.

Project Information	Scalability Level:	
Project ID / District-EA	052000015/ 05-1M550	
Project Description:	In Santa Cruz County from Henry Cowell redwood State Park to Northery Junction of SRS	9/236
Project Route/Location:	SR 09 PM4.00/15.42	
Project Manager (PM):	Doug Hessing	
Project Risk Manager:		

<u> PID - M010 (Required)</u>		
Project Manager*	Dourg Hearing	Date:07/12/2022
Planning*		Date:
Design*		Date:
Project Management (SFP) *		Date:
Maintenance & Ops		Date:
Asset Management		Date:
Engineering Services		Date:

PA&ED - M200 (Required)	
Project Manager*	Date:
Environmental*	Date:
Design*	Date:
Project Management (SFP) *	Date:
Maintenance & Operations	Date:
Asset Management	Date:
Engineering Services	Date:

<u>RTL - M460 (Required)</u>	
Project Manager*	Date:
Design*	Date:
Construction*	Date:
Right of Way*	Date:
Environmental*	Date:
Project Management (SFP)*	Date:
Maintenance & Operations	Date:
Asset Management	Date:
Engineering Services	Date:

*Signatures required. Other signatures may be required based on individual district process or project scope. Please verify with the district Risk Coordinator.

Risk Register for 05-1M550, Hwy 9 Complete Streets Corridor Improvements PM 4.00/15.422

Risk Checkpoint: PID	Dhase	Cost C	ontingency	Range \$k	Schedule Contingency Range (Wkg Days)			
Date: 4/28/2022	Phase	Optimistic	PERT	Pessimistic	Optimistic	PERT	Pessimistic	
Project Nickname: Hwy 9 Complete Streets Corridor Improvements PM 4.00/15.422	0-PA&ED	\$0	\$0	\$0	0	0	0	
EA: 05-1M550	1-PS&E	\$0	\$0	\$0	0	0	0	
Co-Rt, Post Miles: SCR-9-4.00/15.422	2-RW Sup	\$0	\$0	\$0	0	0	0	
Project Manager: DOUG HESSING	3-Con Sup	\$0	\$0	\$0	0	0	0	
FY & Program (SHOPP or STIP):	Support Contingency	\$0	\$0	\$0	0	0	0	
Capital Costs: \$10,000k	9-RW Cap	\$0	\$0	\$0	0	0	0	
Support Costs:	4-Con Cap	\$0	\$0	\$0	0	0	0	
Total Costs: \$10,000k	Capital Contingency	\$0	\$0	\$0	0	0	0	
RTL Target: 12/14/2026	Total Contingency	\$0	\$0	\$0	0	0	0	

					Risk Identification				Risk Assessment Risk Response Quantifying "Red" (High P & I) Lev			sks							
Status	ID #	Туре	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (PxI)	Strategy	Response Actions	Risk Owner	Updated	Impacted Phase	Support (Hrs) Capital Cost (\$k)	Schedule (Days)	Calculated Contingency	
					If the State Share of Utilities cost is over estimated	The State Share of utilities	Updated evaluation indicates	0 Madausta (01	4 - Moderate (\$225,001k -	12		At this time the response would be to discuss with the team to determine if adjustments to project scope is	Right of Way,		9-RW Cap	O \$0k ML \$0k P \$0k	0 0 ML 0 P 0		
Active	1	Threat	Right of Way	Utility Costs	it could result in over programming or inability for the project to compete for funds.	current estimate is \$866,250 for 05-1M552_	significantly different from the PID phase R/W Data Sheet.	50%)	4 - Moderate (1-3	12	Share	warranted. The risk is currently categorized as a threat because the cost could contribute to an overall cost that might jeopardize overall funding.	Martin Miller/Marshall Garcia	5/11/2022	0-PA&ED Sup	O 0 hours ML 0 hours	0 0 ML 0	#REF!	
					If assumption made during 05-1M550_ PID	Assumptions regarding scheduling and escalation policy needed to be made to	Funding is identified allowing		4 - Moderate (\$225,001k - \$450,000k	12					0-PA&ED Sup	P 0 hours O 0 hours ML 0 hours P 0 hours	P 0 O 0 ML 0 P 0	#REF!	
Active	2	Threat	Funding	Schedule and Escalation	development regarding schedule and escalation a not consistent with information available at the time funding is available the schedule and escalation values will need to be adjusted based o updated information.	complete the parent PID. UI Those assumptions are that est the project would be	 scheduling and funding updates. Project cost estimates and schedules should be evaluated when the PA&ED phase is anticipated to be funded. 	3-Moderate (31-50%)	4 - Moderate (1-3	12	Mitigate	Mitigate	A supplemental PID should be processed to evaluate updated assumptions based on funding opportunities. If this work is not completed prior to funding the phase is should be done in the programmed phase.	Project Management/ Doug Hessing	5/11/2022	1-PS&E Sup	O 0 hours	0 0 MI 0	
						start work on the PA&ED phase in January 2023			months)							P 0 hours	P O		
					If utility identifications and relocation coordination	Multiple utilities exist that is require, verification, conflict	exist that specific R/W data sheet	4-High (51-	8 - High (\$450,001k \$900,000k)	32		A supplemental PID should be developed including a discussion of the utility requirements of the segment that	Right of Way and Project		0-PA&ED Sup	O 0 hours ML 0 hours P 0 hours	0 days 0 days 0 days		
Active	3	Threat	Utilities	Utility Relocations	not started early in the PA&ED phase it could result in a delay to the delivery of Right of Way Certification and project delivery.	evaluation, positive location determination (potholing), conflict mapping, and relocations.	utility conflict maps should be delivered to the R/W department by the M224 milestone date.	70%)	8 - High (3-6 months)	32	Mitigate	is receiving the funding. The timelines should be addressed and a separate Risk Register developed for the segment.	Martin Martin Miller/Marshall Garcia and Doug Hessing	5/11/2022	2-RW Sup	O 0 hours ML 0 hours P 0 hours	O 0 ML 0 P 0		
					Further schedule refinement may be necessary	Each segment was assumed		60%	1 - Very Low	5			Project Sponsor		0-PA&ED Sup	O ML	O ML		
Active	4	Threat	Project Management	Segment PID Phase Schedules	when funding is available and could result in an increase or decrease of that particular segment depending on anticipated workloads and agreement	to have received a funding strategy in time to start work in January 2023, Auto	Any need to update or refine segment information for funding or evaluation	5-Very High (>70%)	(insignificant)		Share	This Master Risk Tool should be consulted when funding for any segment becomes available and an independent Risk Tool should be developed for each	Brianna Goodman and Project Manager,	5/11/2022		P	P		
					by the PDT.	Schedule in Open Work Bench start 10/03/2022.	purposes.	85%	4 - Moderate (1-3 months)	20		segment when the segment is proposed for funding.	Doug Hessing						
					M224 needs to be achieved at PA&ED to provide 2	2 TCE and 10 Potholes	Circulate PA&ED PB for	2-Low (11-	4 - Moderate (\$225,001k - \$450,000k	8					0-PA&ED Sup	O ML P	O ML P		
Active	5	Threat	Right of Way	Segment 6- Right of Way Schedule	M224 needs to be achieved at PA&ED to provide 2 months to make M225 Milestone and start the R/W time. Ten Pothole locations need to be identified.	required-R/W Schedule may have the opportunity for reduction.	review with having M224 planned for completion.	30%)	4 - Moderate (1-3		Mitigate	Identify the risk to the individual segments when each segment is programmed and manage the risks	Design- Claudia Espino	5/11/2022	2 DW Sur	O ML	O ML		
								20%	months)	0					2-nivi sup	Р	Р		

Form v3.4 last modified April 2019

Risk Identification							Risk Assessment			Risk Response				Quantifying "Red" (High P & I) Level Risks				
Status	ID #	Туре	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (PxI)	Strategy	Response Actions	Risk Owner	Updated	Impacted Phase	Support (Hrs) Capital Cost (\$k)	Schedule (Days)	Calculated Contingency
Active	6	Opportunity	Design	Segment 6- Design Schedule	If the Design schedule can be brought in to RTL at R/W Certification the project could be delivered roughly 4 months earlier.	Move PS&E to District OE in 5 months (currently from	PDT meets after funding is available and agrees to an acceleration to this segment.	3-Moderate (31	2 - Low (<\$500k)	6			Design Claudia		1-PS&E Sup	O ML P	O ML P	
						allow the opportunity to deliver early based on the R/W Cert date.		50%)	8 - High (3-6 months)	24	Enhance	Work with team to evaluate this risk during PA&ED.	Espino	5/11/2022	0-PA&ED Sup	O ML P	O ML P	
				nental Segment 4 and 5- PA&ED schedule	D If initial studies indicate a CEQA CE is appropriate the PA&ED time line may be able to be reduced.	CEQA ED planned as IS with ND and NEPA CE. See Envr PEAR for details.	Refinement of scope and re- evaluation results in a ENVR down scope of CEQA ED from IS-ND to CE	40%	2 - Low (<\$500k)	6					0-PA&ED Sup	O ML P	O ML P	
								50%) -								O ML P	O ML P	
Active	8	Opportunity	Environmental					40%	8 - High (3-6 months)	24	Enhance	Identify opportunity early in PA&ED and seek to exploit.	Environmental - Lara Bertaina	5/11/2022	3-Con Sup			

Attachment I



Highway 9 San Lorenzo Valley Complete Streets Corridor Plan









Executive Summary

Highway 9/San Lorenzo Valley Complete Streets Corridor Plan

Shaped by community input about transportation challenges that San Lorenzo Valley residents currently face and desires for the future, the **Highway 9/San Lorenzo Valley Complete Streets Corridor Plan** (Hwy9/SLV Corridor Plan) is a planning study that provides a vision, guiding principles, and realistic strategies to improve how people get around the San Lorenzo Valley.

This corridor plan focuses on the section of Highway 9 which serves as the "Main Street" and economic center for the towns, villages, and communities of Felton, Ben Lomond, Brookdale, and Boulder Creek, as well as connecting county maintained roads (Figure **ES 1**). Priorities identified in the plan improve safety for pedestrians. bicyclists and improve access to motorists; schools, businesses, residences, and transit; and improve traffic operations throughout this travel corridor

This is a "Complete Streets" plan, which means it is focused on planning, designing, operating, and maintaining transportation facilities that improve mobility for all users, including motorists, pedestrians, bicyclists, transit vehicles, and truckers, as appropriate to the function and context of the facility. A well-designed complete street does not just work better; it *feels* better, particularly for pedestrians and cyclists, and it *looks* better, with enhanced aesthetics and amenities that complement the setting and adjacent uses.

Existing Conditions

This mountainous area of Santa Cruz County has narrow curving roadways



frequently impacted by steep terrain, high collision rates, significant gaps in bicycle and pedestrian facilities, limited transit service, traffic backups at a number of choke points, as well as pavement, drainage, and other assets in disrepair.

Daily traffic volumes: Highway 9 is used by over 16,000 vehicles between Ben Lomond and Boulder Creek and over 21,000 vehicles each day between Felton and Ben Lomond, with use expanding with tourism and special event traffic during summer months. (see **Figure ES 2**)

Traffic choke points: While traffic volumes through the SLV are relatively low compared to other state highways and major arterials in Santa Cruz County, during peak travel periods motorists regularly experience moderate to severe backups through the town centers, in front of SLV elementary, middle, and high schools (SLV Schools Campus) just north of Felton, and at

major intersections, including the Highway 9/Graham Hill Road intersection in Felton and Highway 9/Bear Creek Road intersection in Boulder Creek.

		-					-
Figure F	C 2	Average	Daily	Traffic	Volumes	on Highway	/ Q
Iguie L	<u> </u>	Average	Daily	name	volumes	Un ingilway	3

Post		Daily Traffic
Mile	Location Description – HIGHWAY 9	Volume
5.64	FELTON, north of SAN LORENZO AVENUE	7600
6.46	FELTON, south of GRAHAM HILL ROAD	12,100
6.46	FELTON, north of GRAHAM HILL ROAD	20,800
8.11	BEN LOMOND, south of GLEN ARBOR ROAD	19,600
9.71	BEN LOMOND, SAN LORENZO RIVER BRIDGE	15,200
11.3	BROOKDALE, north of ALAMEDA AVENUE	11,400
13.04	BOULDER CREEK, south of SOUTH JCT. RTE. 236	12,000
13.24	South of BEAR CREEK ROAD	17,700
13.24	North of BEAR CREEK ROAD	10,700
20.86	North of WATERMAN GAP, NORTH JCT. RTE. 236	2800

Credit: Caltrans Traffic Census Program, 2017

Collisions: There have been a number of significant collisions in the past decade in the SLV. Leading causes of injury and fatal collisions from 2013 to 2017 involved unsafe speed or improper turning *(CHP SWITRS)*. Residents are justly concerned about speeding on roadways throughout the SLV, especially near schools, residential, and commercial areas. The narrow curving right-of-way and close proximity to buildings, fences, and trees meant nearly 40% of all collisions 2013-2017 were "hit object" collisions, rather than a collision between two vehicles. Impaired driving from alcohol or drugs is also a significant challenge. There have been about 30 collisions involving bicycles and pedestrians in the corridor over the past ten years. California Highway Patrol (CHP) is responsible for traffic enforcement through the SLV, though officers are responsible for covering very large areas. Caltrans conducts investigations of major incidents.

Walking: While there are some pedestrian facilities (sidewalks, paths, and crosswalks) in town centers, the rural nature of the area has left most pedestrians outside of the town centers walking in dirt along the shoulders of Highway 9 and on local roads. Especially as more vehicles use the roads, more formalized separation of pedestrians is desirable. Many existing sidewalks in town centers are not compliant with the latest accessibility (Americans with Disabilities Act or ADA) standards. Narrow roadways, pinched by hillsides, gullies, and trees make construction of walking notify between town centers difficult.

walking paths between town centers difficult.

Bicycling: While there are no dedicated bicycle lanes or paths along Highway 9 or local roads in the SLV, the highway is regularly used by bicyclists commuting through and between town centers, cyclists accessing parks, as well as recreational cyclists, sometimes traveling the entire length of Highway 9 from Santa Clara County/Saratoga to Santa Cruz. Where shoulders exist, cyclists often use that space, but otherwise are sharing the road surface with motorists.



Credit: SCCRTC

Transit: The SLV is served by three public bus routes, school buses, as well as paratransit services for seniors and people with disabilities offered by Santa Cruz METRO and Community

Bridges Lift Line. Santa Cruz METRO's three bus routes have an average monthly ridership of approximately 40,000.

Goals and Objectives

The primary purpose of the Highway 9/San Lorenzo Valley Complete Streets Corridor Plan is to create an actionable short-term and longer-term multimodal complete streets corridor plan that addresses transportation challenges for all modes of transportation along the Highway 9 corridor through the San Lorenzo Valley (generally Felton to Boulder Creek) and within the town centers. In evaluating potential transportation projects, the project team considered how well projects address objectives identified by the community. Chapter 1 Introduction provides greater detail on objectives and criteria used to evaluate priority projects.

Project Objectives

- Safetv
- Pedestrian Access and Connectivity
- Bike Access and Connectivity •
- Sustainability/Reduce emissions and vehicle miles traveled (VMT)
- Traffic Flow for Vehicles
- System Preservation/Maintenance

- Transit Connectivity
- Economic Vitality
- Town Character Compatibility
- Public Support
- Ease of Implementation, including cost and available funding
- Anticipated Use Level

Implementation Priorities

In recognition that funding for transportation projects is limited, the Highway 9/San Lorenzo Valley Complete Streets Corridor Plan prioritizes transportation investments that improve multimodal transportation access and connectivity, safety and security, operations, economic vitality, and environmental quality through the San Lorenzo Valley. In order to identify priorities, the project team (SCCRTC, Caltrans, County Public Works, County Planning, Santa Cruz METRO, and consultants) reviewed existing conditions (collisions, facilities, traffic volumes, etc.), conducted extensive community outreach, and considered information from other relevant documents and past community input. After reviewing hundreds of project ideas and challenge areas, the project team developed a consolidated list of a priority projects. The team then

NEW MARKET New New Improved Two Way New New Improved New Vehicle Vehicle Angled Parkng Side-Angled Parkng Center Side-Bike Bike Lane Lane walk Lane Left Turn Lane walk Lane Ρ Ρ 5' 19' +11 - 12 12' 11 - 1219' +- 6 5 4 - 6 Credit: Trail People: photo: Google Streetview

Figure ES 4: Town Center Enhanced Cross Section (Design concept only)

evaluated how well those projects address goals and primary objectives and solicited stakeholder feedback on project components. The overall vision for the corridor, including corridor-wide priorities and sample cross sections (see **Figure ES 4**), are included in Chapter 2.

Priority Projects: Chapter 3 *Priority Projects by Location* identifies priority projects along the corridor. A more exhaustive list of ideas and concepts for the SLV are included in Appendix B *Identified Projects List.* A range of potential short- and longer-term infrastructure modifications in these areas are described in Chapter 3 and are listed in **Table ES 4**. **Figures ES 6 to ES 9** show components of these priority projects, split according to mode of transportation.

Based on how well the priority projects meet objectives listed above and public input, some of the highest priorities for the corridor include the following:

- SLV Schools Campus Circulation: improving traffic flow and bike and pedestrian access to SLV elementary, middle, and high schools has consistently been identified as one of the highest priorities for the SLV. (Projects 9 and 10)
- Highway 9/Graham Hill Road Intersection: redesign intersection to improve circulation, pedestrian, and bicycle access through the intersection (Project 8)
- Felton: pedestrian, roadway, and parking modifications (Projects 4, 6, and 7)
- Ben Lomond: multimodal improvements in the town center and Highlands Park connection on Highway 9 (Projects 13 and 16)
- Brookdale: crosswalk safety improvements (Project 20)
- Boulder Creek: crosswalk improvements (Project 23) and Bear Creek Road/Highway 9 intersection modification (Project 27)
- Corridor-wide priorities: roadway maintenance, speed reduction, crosswalks, pedestrian visibility, and wider shoulders for bicycles

Additional information regarding implementation priorities can be found in Chapter 4 *Project Evaluation and Implementation Plan.*

How this Plan will be Used

This Complete Streets Corridor Plan is a high-level planning document. While implementation of any of the projects will require additional feasibility analysis, this plan will be used to guide and coordinate transportation investments along the Highway 9 corridor through the SLV. It serves as a resource for Caltrans, County Public Works, County Planning, the Santa Cruz County



Regional Transportation Commission (RTC), SLV Unified Schools District (SLVUSD), residents and businesses to use to improve this transportation corridor. It prioritizes infrastructure projects (Chapter 4 *Project Evaluation and Implementation Plan*); shows preferred roadway cross sections for town centers, suburban areas, and rural areas, which can be used as a framework for future updates to infrastructure in areas not identified in the priority projects (Chapter 2 *Corridor Vision*); includes a "toolkit" illustrating a range of potential transportation facility modifications, projects, and programs, and answers questions about what can be done within Caltrans' right-of-way (Appendix A *Complete Streets Improvements Toolkit*); and identifies potential funding sources, including opportunities to use \$10 million of Measure D revenues earmarked for the area to leverage other local, state, and federal funds (Chapter 4 *Project Evaluation and Implementation Plan* and Appendix C *Funding Opportunities*).

While it is anticipated that many projects will be implemented independently, as other transportation and non-transportation projects are implemented along the corridor, public and private entities are expected to consider and incorporate complete streets components and concepts identified in this corridor plan. This may include Caltrans maintenance, operational, and preservation projects (SHOPP), new land use developments, or major infrastructure modifications.

Area	#	Projects/Concepts
	А	SLV Corridor Safety Measures
le	В	SLV Corridor Transit and Travel Demand Management
wio	С	SLV Corridor Bicycle Facilities or Separated Paths
dor	D	SLV Corridor Increase Turnouts
orrio	Е	SLV Corridor Pedestrian Crossing Safety, Lighting and other Visibility
ŏ	F	SLV Corridor Roadway Maintenance
	G	SLV Corridor Emergency Preparedness and Resiliency
	1	Henry Cowell State Park Access and Parking
	2	Southern Felton Neighborhood Bicycle and Walking Paths
	3	Henry Cowell State Park to Downtown Felton Pedestrian and Bicycle Connection
ton	4	Downtown Felton Crosswalks
Felt	5	Downtown Felton Bicycle and Walking Connections near Library
	6	Downtown Felton Pedestrian Walking Facilities
	7	Downtown Felton Roadway, Bicycle, and Parking Improvements
	8	Highway 9 and Graham Hill Rd Intersection Redesign
, ols	9	Pedestrian and Bicycle Connection to SLV Schools Campus from Felton
SLV	10	SLV Schools Campus Site Access
Sc	11	North SLV Schools Pedestrian and Bicycle Connections
	12	Willowbrook Drive Commercial Area Improvements and Glen Arbor Bike/Ped Connection
p	13	Pedestrian and Bicycle Connections from Ben Lomond to Highlands Park
non	14	Ben Lomond Crosswalk and Transit Improvements
Lor	15	Mill Street and Glen Arbor Rd Pedestrian Improvements
en	16	Ben Lomond Downtown Core Multiuse Improvements
Δ	17	Pedestrian and Bicycle Connections from Mill St to Alba Rd
	18	Hubbard Gulch/Alba Rd Operational Improvements
ale	19	Brookdale Sidewalks
okd	20	Brookdale Crosswalk Improvements
Bro	21	Irwin Way/Highway 9 Intersection Improvements
	22	Boulder Creek Elementary Neighborhood Multimodal Improvements
eek	23	Boulder Creek Crosswalk Improvements
ບັ	24	Parking Modifications or Bicycle Facilities in Downtown Boulder Creek
der	25	Sidewalk and Storefront Improvements in Downtown Boulder Creek
no	26	Bike/Ped Connections to Boulder Creek Library & Bear Creek Rd, Traffic Calming Hwy 236
Ω	27	Highway 9/Bear Creek Rd Intersection Improvements
North	28	Pedestrian and Bicycle Improvements at Garrahan Park and Mt Store

Table ES 5: Priority Projects



Figure ES 6: Auto Priority Projects Map



Figure ES 7: Pedestrian Priority Projects Map


Figure ES 8: Bicycle Priority Projects Map



Figure ES 9: Transit Priority Projects Map

Attachment J

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