

Encinitas CMLS: Rail Crossing Project List

Access improvements providing east-west connectivity across the rail corridor.

DRAFT: 12/7/2017

#	Name	Post Mile	Community	Improvement Description	Detailed Description ¹	Phase	Planning-Level Cost Estimate		
							Range ²	Low ²	High ²
0	Rail Corridor Trenching ³	NA	All	Trench or Cut & Cover	Trench ("Low" cost estimate) or cut & cover ("High" cost estimate) in two sections: Leucadia: North of Encinitas Blvd Cardiff: South of Santa Fe Dr	NA	\$300m / \$1.6b	\$300,000,000	\$1,600,000,000
1	La Costa Ave	0.0	Leucadia	Crossing Improvement	- Near Term: New sidewalk from Vulcan Ave to Coast Hwy 101. Wider sidewalk (if possible) across bridge. Traffic calming along La Costa Ave to improve bike facility. More direct pedestrian path connecting Vulcan Ave to La Costa Ave (does not include potential right-of-way cost). - Long Term (Not Reflected in Cost Estimate): In conjunction with LOSSAN double-tracking, new overcrossing, sidewalks and bike facilities, plus potential path adjacent to rail corridor connecting Vulcan Ave to north side of La Costa Ave.	1	\$120k / \$150k	\$120,000	\$150,000
2	Bishop's Gate Rd	0.3	Leucadia	New Rail Crossing	A new rail at-grade or undercrossing; pedestrian connection to Ashbury St; pedestrian crossing at Vulcan Ave/ Ashbury St; pedestrian connection to Coast Hwy 101 planned roundabout crosswalk.	3	\$3m / \$10.5m	\$3,000,000	\$10,500,000
3	Grandview St/ Hillcrest Dr	0.5	Leucadia	New Rail Crossing	A new rail at-grade or undercrossing; pedestrian connections to Coral Cove Way and Hillcrest Dr; pedestrian crossing at Vulcan Ave/ Coral Cove Way and Vulcan Ave/ Hillcrest Dr; pedestrian connection to Coast Hwy 101 planned roundabout crosswalk.	1	\$2.6m / \$9.6m	\$2,600,000	\$9,600,000
4	Sanford St or Jupiter St	0.7 or 0.8	Leucadia	New Rail Crossing	- Sanford St: A new rail at-grade or undercrossing; pedestrian connection to Sanford St; pedestrian crossing at Vulcan Ave/ Sanford St; pedestrian connection to Coast Hwy 101 proposed crosswalk. - Jupiter St: A new rail at-grade or undercrossing; pedestrian connection to N Vulcan Ave; pedestrian crossing at N Vulcan Ave; pedestrian connection to Coast Hwy 101 planned roundabout crosswalk.	1	\$2.8m / \$13.7m	\$2,800,000	\$13,700,000
5	Phoebe St or E Glaucus St	1.0 or 1.1	Leucadia	New Rail Crossing	- Phoebe St: A new rail at-grade or undercrossing; pedestrian connection to N Vulcan Ave; pedestrian crossing at N Vulcan Ave; pedestrian connection to Coast Hwy 101 planned crosswalk. - E Glaucus St: A new rail at-grade or undercrossing; pedestrian connection to E Glaucus St; pedestrian crossing at N Vulcan Ave/ E Glaucus St; pedestrian connection at Coast Hwy 101/ W Glaucus St proposed crosswalk.	1	\$3.1m / \$14m	\$3,100,000	\$14,000,000
6	Leucadia Blvd (Crossing)	1.3	Leucadia	Crossing Improvements	New sidewalk on the south side of the rail crossing with a new crosswalk across Coast Hwy on the south side of the intersection. This crosswalk needs additional study to determine feasibility and/or trade-offs with traffic operations of the signal.	1	\$275k / \$365k	\$275,000	\$365,000
7	Leucadia Blvd (Quiet Zone)	1.3	Leucadia	Quiet Zone Improvements	Supplemental Safety Measures sufficient to achieve quiet zone status per FRA and CPUC requirements.	1	\$580k / \$1.2m	\$580,000	\$1,200,000
8	Daphne St or Basil St	1.5 or 1.7	Leucadia	New Rail Crossing	- Daphne St: A new at-grade or undercrossing; pedestrian connection to N Vulcan Ave; pedestrian crossing at N Vulcan Ave; pedestrian connection to Coast Hwy 101/ Daphne St planned crosswalk. - Basil St: A new at-grade or undercrossing; pedestrian connection to N Vulcan Ave; pedestrian crossing at N Vulcan Ave; pedestrian connection to Coast Hwy 101/Basil St planned crosswalk.	1	\$3.1m / \$13.8m	\$3,100,000	\$13,800,000

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							Range ²				
9	El Portal St	1.9	Leucadia	New Rail Crossing	Construction for an undercrossing funded; tentatively planned in 2019.	NA	NA		NA	NA	
10	Marcheta St/ Orpheus Ave	2.1	Leucadia	New Rail Crossing	A new at-grade or undercrossing; pedestrian connection to Orpheus Ave; pedestrian crossing at Vulcan Ave/ Orpheus Ave; pedestrian connection to Coast Hwy 101/ Marcheta St planned crosswalk.	1	\$3m / \$10.5m		\$3,000,000	\$10,500,000	
11	A St/ Sunset Dr	2.4	Leucadia	New Rail Crossing	A new at-grade or undercrossing; pedestrian connection to Sunset Dr; pedestrian crossing at Vulcan Ave/ Sunset Dr potentially including traffic calming or roundabout; pedestrian connection to Coast Hwy 101/ A St planned crosswalk.	1: Traffic calming at Vulcan Ave/ Sunset Dr 2: Rail corridor crossing	\$3m / \$13.8m		\$3,000,000	\$13,800,000	
12	Encinitas Blvd	2.5	Old Encinitas	Crossing Improvement	- Near Term: Upgrade bike lanes to protected bike lanes by reducing vehicle travel lane widths. - Long Term (Not Reflected in Cost Estimate): Construct separated multi-use path on south side of Encinitas Blvd.	1	\$50k / \$100k		\$50,000	\$100,000	
13	Encinitas Station/ C St D St E St	2.6 2.7 2.8	Old Encinitas	Quiet Zone Improvements	Supplemental Safety Measures sufficient to achieve quiet zone status per FRA and CPUC requirements.	1	\$1.8m / \$3m		\$1,800,000	\$3,000,000	
14	H St or I St	3.1 or 3.2	Old Encinitas	New Rail Crossing	A new at-grade or undercrossing; pedestrian crossing at Vulcan Ave/H St or Vulcan Ave/I St.	2	\$3.1m / \$14.8m	Potentially infeasible	\$3,100,000	\$14,800,000	
15	Santa Fe Dr	3.4	Cardiff	NA	Existing undercrossing at Swami's.	NA	NA		NA	NA	
16	Verdi Ave	4.0	Cardiff	New Rail Crossing	A new at-grade or undercrossing; pedestrian connection to Verdi Ave; pedestrian crossing at San Elijo Ave/ Verdi Ave; pedestrian connection to Coast Hwy 101 proposed crosswalk.	1	\$2.7m / \$12.1m		\$2,700,000	\$12,100,000	
17	Birmingham Dr	4.5	Cardiff	New Rail Crossing	A new at-grade, undercrossing, or overcrossing; pedestrian connection to Birmingham Dr; pedestrian crossing at San Elijo Ave/ Birmingham Ave; pedestrian connection to Coast Hwy 101 proposed crosswalk.	1	\$3.4m / \$14m (Note 4)		\$3,400,000	\$14,000,000	
18	Chesterfield Dr	4.7	Cardiff	Crossing Improvements	A new crosswalk across Coast Hwy and the rail corridor on the south side of the intersection. This crosswalk needs additional study to determine feasibility and/or trade-offs with traffic operations of the signal.	NA	\$25k / \$50k		\$25,000	\$50,000	
19	Norfolk Dr or Dublin Dr	4.8 or 4.9	Cardiff	New Rail Crossing	- Norfolk Dr: A new at-grade or undercrossing; pedestrian connection to Norfolk Dr; pedestrian crossing at San Elijo Ave/ Norfolk Dr; pedestrian connection to Coast Hwy 101 proposed crosswalk. - Dublin Dr (Preferred): A new at-grade or undercrossing; pedestrian connection to Dublin Dr; pedestrian crossing at San Elijo Ave/ Dublin Dr; pedestrian connection to Coast Hwy 101 proposed crosswalk.	3	\$3.4m / \$14.3m		\$3,400,000	\$14,300,000	

Notes:

- All pedestrian crossings on Vulcan Ave are assumed to include pop-outs, speed table, and signage and lighting.
- For new rail crossings, the "Low" cost refers to at-grade (including Quiet Zone features), and the "High" cost refers to undercrossing/overcrossing.
For Quiet Zone improvements, the "Low" cost preserves existing infrastructure as much as possible, and the "High" cost includes replacement/upgrade of existing infrastructure.
For all other improvements, the "Low" and "High" costs capture a range of potential costs for the same facilities.
Cost estimates do not include right-of-way.
- Trenching information is very tentative and subject to further refinement.
- At Birmingham Drive, the "High" cost refers to an undercrossing. An overcrossing is estimated to cost up to 25% more (approximately \$17m).

Trench Cost Range	\$300m / \$1.6b	\$300,000,000	\$1,600,000,000
Crossing Cost Range	\$36m / \$146m	\$36,100,000	\$146,000,000

Encinitas CMLS: Bike & Pedestrian Project List

Projects from the Active Transportation Plan that are associated with CMLS improvements.

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			Total Length	
#	Name	Description	Feet	Miles
1	Leucadia Streetscape Buffered Bike Lanes	5.0 miles of buffered bike lanes, 323 feet of bike lanes, and 0.9 miles of sidewalks.	31,507	6.0
2	Vulcan North Multi-use Path	3.8 miles of multi-use paths.	20,024	3.8
3	La Veta Bike Boulevard	0.6 miles of bike boulevard.	3,226	0.6
4	Encinitas Boulevard Southside Multi-use Path/Northside Trail	0.7 miles of multi-use paths and 0.2 miles of sidewalks.	4,777	0.9
5	Cornish Bike Boulevard	0.9 miles of bike boulevard.	4,566	0.9
6	Coastal Rail Trail	1.4 miles of multi-use paths.	7,190	1.4
7	Vulcan South Multi-use Path	1.0 mile of multi-use paths.	5,116	1.0
8	Coast Highway South Bike Lanes	5.2 miles of buffered bike lanes and 715 feet of bike lanes.	28,158	5.3
9	West Bluff Multi-use Path	1.7 miles of multi-use paths and 0.4 miles of sidewalks.	11,396	2.2
10	Glaucus EW Connector	0.6 miles of shared bike routes.	3,310	0.6
11	Leucadia Boulevard Buffered Bike Lanes	1.3 miles of buffered bike lanes and 0.5 miles of sidewalks.	9,314	1.8
12	Union EW Connector	0.4 miles of multi-use paths, 0.2 miles of bike lanes, 780 feet of shared bike routes, and 0.2 miles of sidewalks.	4,942	0.9
13	Encinitas Boulevard Northside Connectors	457 feet of multi-use paths, 0.3 miles of buffered bike lanes, 0.2 miles of bike lanes, and 548 feet of sidewalks.	3,633	0.7
14	Santa Fe Drive Buffered Bike Lanes	1.2 miles of buffered bike lanes and 478 feet of sidewalks.	6,997	1.3
15	Norfolk EW Connector	0.5 miles of shared bike routes, 0.3 miles of sidewalks, and 281 feet of trails.	4,680	0.9
16	Upper Bluff and Pole Road Trail/East Side Sidewalk	0.4 miles of sidewalks, 1.5 miles of trails, and a 206-foot bridge.	9,895	1.9
17	Birmingham EW Connector	0.2 miles of shared bike routes and 0.4 miles of sidewalks.	3,106	0.6
TOTAL LENGTH			161,837	30.7