

APPENDIX 2-A: ROADWAY CROSSINGS, MODIFICATIONS, AND CLOSURES

Table 1 Existing Roadway Crossings¹

Alternative	Railroad Xing Location	Existing Railroad Grade and HSR Grade ²	City	County
San Francisco to South San Francisco Subsection				
A/B	I-280	Overcrossing	San Francisco	San Francisco
A/B	Mission Bay Drive	At grade	San Francisco	San Francisco
A/B	I-280	Overcrossing	San Francisco	San Francisco
A/B	16th Street	At grade	San Francisco	San Francisco
A/B	Mariposa Street	Overcrossing	San Francisco	San Francisco
A/B	I-280	Overcrossing	San Francisco	San Francisco
A/B	22nd Street	Overcrossing	San Francisco	San Francisco
A/B	23rd Street	Overcrossing	San Francisco	San Francisco
A/B	I-280	Overcrossing	San Francisco	San Francisco
A/B	Cesar Chavez Street	Aerial	San Francisco	San Francisco
A/B	I-280	Overcrossing	San Francisco	San Francisco
A/B	Evans Avenue	Aerial	San Francisco	San Francisco
A/B	Jerrold Avenue	Aerial	San Francisco	San Francisco
A/B	Quint Street	Aerial	San Francisco	San Francisco
A/B	Oakdale Avenue	Overcrossing	San Francisco	San Francisco
A/B	Williams Avenue	Overcrossing	San Francisco	San Francisco
A/B	Paul Avenue	Overcrossing	San Francisco	San Francisco
A/B	Tunnel Avenue ³	Overcrossing	Brisbane	San Mateo
A/B	US 101/US 101 on-ramp	Overcrossing	Brisbane	San Mateo
A/B	Oyster Point Boulevard	Overcrossing	South San Francisco	San Mateo
A/B	East Grand Avenue	Overcrossing	South San Francisco	San Mateo
A/B	US 101	Overcrossing	South San Francisco	San Mateo
A/B	Airport Boulevard	Aerial	South San Francisco	San Mateo
A/B	South Linden Avenue	At grade	South San Francisco	San Mateo

Alternative	Railroad Xing Location	Existing Railroad Grade and HSR Grade ²	City	County
San Bruno to San Mateo Subsection				
A/B	Scott Street	At grade	San Bruno	San Mateo
A/B	I-380	Overcrossing	San Bruno	San Mateo
A/B	San Bruno Avenue	Aerial	San Bruno	San Mateo
A/B	San Mateo Avenue	Aerial	San Bruno	San Mateo
A/B	Angus Avenue	Aerial	San Bruno	San Mateo
A/B	Center Street	At grade	Millbrae	San Mateo
A/B	Hillcrest Boulevard	Aerial	Millbrae	San Mateo
A/B	Millbrae Avenue	Overcrossing	Millbrae	San Mateo
A/B	Broadway	At grade	Burlingame	San Mateo
A/B	Oak Grove Avenue	At grade	Burlingame	San Mateo
A/B	North Lane	At grade	Burlingame	San Mateo
A/B	Howard Avenue	At grade	Burlingame	San Mateo
A/B	Bayswater Avenue	At grade	Burlingame	San Mateo
A/B	Peninsula Avenue	At grade	Burlingame	San Mateo
A/B	Villa Terrace	At grade	San Mateo	San Mateo
A/B	East Bellevue Avenue	At grade	San Mateo	San Mateo
A/B	East Poplar Avenue	Aerial	San Mateo	San Mateo
A/B	East Santa Inez Avenue	Aerial	San Mateo	San Mateo
A/B	Monte Diablo Avenue	Aerial	San Mateo	San Mateo
A/B	Tilton Avenue	Aerial	San Mateo	San Mateo
A/B	1st Avenue	At grade	San Mateo	San Mateo
A/B	2nd Avenue	At grade	San Mateo	San Mateo
A/B	3rd Avenue	At grade	San Mateo	San Mateo
A/B	4th Avenue	At grade	San Mateo	San Mateo
A/B	5th Avenue	At grade	San Mateo	San Mateo

Alternative	Railroad Xing Location	Existing Railroad Grade and HSR Grade ²	City	County
A/B	9th Avenue	At grade	San Mateo	San Mateo
San Mateo to Palo Alto Subsection				
A/B	SR 92	Overcrossing	San Mateo	San Mateo
A/B	25th Avenue	Aerial (under construction) ⁴	San Mateo	San Mateo
A/B	Hillsdale Boulevard	Aerial	San Mateo	San Mateo
A/B	42nd Avenue	Aerial	San Mateo	San Mateo
A/B	Ralston Avenue	Aerial	Belmont	San Mateo
A/B	Harbor Boulevard	Aerial	Belmont	San Mateo
A/B	Holly Street	Aerial	San Carlos	San Mateo
A/B	Brittan Avenue	Aerial	San Carlos	San Mateo
A/B	Howard Avenue	Aerial	San Carlos	San Mateo
A/B	Whipple Avenue	At grade	Redwood City	San Mateo
A/B	Brewster Avenue	At grade	Redwood City	San Mateo
A/B	Broadway	At grade	Redwood City	San Mateo
A/B	Jefferson Avenue	Aerial	Redwood City	San Mateo
A/B	Maple Street	At grade	Redwood City	San Mateo
A/B	Main Street	At grade	Redwood City	San Mateo
A/B	Chestnut Street	At grade	Redwood City	San Mateo
A/B	SR 84	Overcrossing	Redwood City	San Mateo
A/B	Fifth Avenue	Overcrossing	Redwood City	San Mateo
A/B	Fair Oaks Lane	At grade	Atherton	San Mateo
A/B	Watkins Avenue	At grade	Atherton	San Mateo
A/B	Encinal Avenue	At grade	Menlo Park	San Mateo
A/B	Glenwood Avenue	At grade	Menlo Park	San Mateo
A/B	Oak Grove Avenue	At grade	Menlo Park	San Mateo
A/B	Ravenswood Avenue	At grade	Menlo Park	San Mateo

Alternative	Railroad Xing Location	Existing Railroad Grade and HSR Grade ²	City	County
A/B	Palo Alto Avenue	At grade	Palo Alto	Santa Clara
A/B	University Avenue	Aerial	Palo Alto	Santa Clara
A/B	Embarcadero Road	Aerial	Palo Alto	Santa Clara
A/B	Churchill Avenue	At grade	Palo Alto	Santa Clara
A/B	Oregon Expressway	Aerial	Palo Alto	Santa Clara
A/B	Meadow Drive	At grade	Palo Alto	Santa Clara
A/B	Charleston Road	At grade	Palo Alto	Santa Clara
A/B	San Antonio Road	Overcrossing	Palo Alto	Santa Clara
Mountain View to Santa Clara Subsection				
A/B	Rengstorff Avenue	At grade	Mountain View	Santa Clara
A/B	Shoreline Boulevard	Overcrossing	Mountain View	Santa Clara
A/B	Castro Street	At grade	Mountain View	Santa Clara
A/B	SR 85	Overcrossing	Mountain View	Santa Clara
A/B	Whisman Road	Overcrossing	Mountain View	Santa Clara
A/B	SR 237	Overcrossing	Mountain View	Santa Clara
A/B	Mary Avenue	At grade	Sunnyvale	Santa Clara
A/B	Mathilda Avenue	Overcrossing	Sunnyvale	Santa Clara
A/B	Sunnyvale Avenue	At grade	Sunnyvale	Santa Clara
A/B	Fair Oaks Avenue	Overcrossing	Sunnyvale	Santa Clara
A/B	Wolfe Road	Overcrossing	Sunnyvale	Santa Clara
A/B	County Route G2 (Lawrence Expressway)	Overcrossing	Sunnyvale	Santa Clara
A/B	Bowers Avenue	Aerial	Santa Clara	Santa Clara
A/B	San Tomas Expressway	Overcrossing	Santa Clara	Santa Clara
A/B	Scott Boulevard	Overcrossing	Santa Clara	Santa Clara
San Jose Diridon Station Approach Subsection⁵				
A/B (Viaduct to I-880)	Lafayette Street	Aerial	Santa Clara	Santa Clara

Alternative	Railroad Xing Location	Existing Railroad Grade and HSR Grade ²	City	County
A/B (Viaduct to I-880)	De La Cruz Boulevard	Overcrossing	Santa Clara	Santa Clara
A/B (Viaduct to I-880)	I-880	Overcrossing	San Jose	Santa Clara
A	Hedding Street	Overcrossing	San Jose	Santa Clara
A	West Taylor Street	Aerial	San Jose	Santa Clara
A	West Julian Street	Aerial	San Jose	Santa Clara
A	West Santa Clara Street	Aerial	San Jose	Santa Clara
A	Park Avenue	Aerial	San Jose	Santa Clara
A	West San Carlos Street	Overcrossing	San Jose	Santa Clara
A	Auzerais Avenue	At grade	San Jose	Santa Clara
A	I-280	Aerial	San Jose	Santa Clara
A	Drake Street	At grade	San Jose	Santa Clara
A	Bird Avenue	Aerial	San Jose	Santa Clara
A	Delmas Avenue	Aerial	San Jose	Santa Clara
A	Prevost Street	Aerial	San Jose	Santa Clara
A	SR 87	Aerial	San Jose	Santa Clara
A	Willow Street	Aerial	San Jose	Santa Clara
A	West Alma Avenue	Aerial	San Jose	Santa Clara

HSR = high-speed rail

I- = Interstate

SR = State Route

US = U.S. Highway

Xing = crossing

¹ This table identifies the locations where the existing railroad crosses existing roadways. There would be no change to the grade of these existing crossings.

² Overcrossing = Currently railroad below roadway

At grade = Currently railroad crosses the roadway at grade

Aerial = Currently railroad crosses above the roadway

³ The project would result in the relocation of the Tunnel Avenue overcrossing. The grade would remain the same; the only change would be in the location of the overcrossing.

⁴ The grade-separated aerial crossing at 25th Avenue is currently under construction and the project would not result in any changes to the grade of this proposed crossing. In addition, grade-separated aerial crossings are proposed at 28th Avenue and 31st Avenue and the project would not result in any changes to these proposed changes to the grade.

⁵ For the San Jose Diridon Station Approach Subsection, the information in this table is limited to the existing roadway crossings along the Caltrain right-of-way. Additional information about new roadway crossings are shown in Table 2.

Table 2 Proposed Roadway Crossings of High-Speed Rail, Modifications, and Closures²

Type	Alternative	Roadway/Path	Existing Road/Path Grade at Roadway Xing	Proposed Road/Path Profile at HSR	Proposed HSR Grade (Above or Below) at Roadway Xing	Grade Separation	Closure	Modification	City	County
San Francisco to South San Francisco Subsection										
Roadway Modification	A	Tunnel Avenue	N/A	N/A	N/A	N/A	N/A	Realign Tunnel Avenue to east	Brisbane	San Mateo
Roadway Modification	A/B	Tunnel Avenue Overpass	Aerial	No change	Below	Yes	N/A	Relocate Tunnel Avenue overpass and southern terminus connection to Valley Drive at Bayshore Boulevard	Brisbane	San Mateo
Roadway Modification	A/B	Lagoon Road	N/A	N/A	N/A	N/A	N/A	Extend Lagoon Road to west to new Tunnel Avenue overpass	Brisbane	San Mateo
San Bruno to San Mateo Subsection										
Roadway Modification	A/B	Hillcrest Boulevard	Trench/Cut	No change	Above	Yes	N/A	Widen existing underpass	Millbrae	San Mateo
Roadway Modification	A/B	California Drive	N/A	N/A	N/A	N/A	N/A	Extend California Drive north to Victoria Avenue, to replace Serra Avenue	Millbrae	San Mateo
Road Closure	A/B	Serra Avenue	N/A	N/A	N/A	N/A	Yes	Road closure	Millbrae	San Mateo
San Mateo to Palo Alto Subsection										
Roadway Modification	B	Ralston Avenue	Trench/Cut	No change	Above	N/A	N/A	Replace underpass	Belmont	San Mateo
Roadway Modification	B	Holly Street	Trench/Cut	No change	Above	N/A	N/A	Replace underpass	San Carlos	San Mateo
Roadway Modification	B	25th Avenue	Trench/Cut (Proposed) ¹	No change	Above	N/A	N/A	Extend underpass	San Mateo	San Mateo
Roadway Modification	B	28th Avenue	Trench/Cut (Proposed) ¹	No change	Above	N/A	N/A	Extend underpass	San Mateo	San Mateo
Roadway Modification	B	31st Avenue	Trench/Cut (Proposed) ¹	No change	Above	N/A	N/A	Extend underpass	San Mateo	San Mateo
Roadway Modification	B	42nd Avenue	Trench/Cut	No change	Above	N/A	N/A	Extend underpass	San Mateo	San Mateo
Roadway Modification	B	Harbor Boulevard	Trench/Cut	No change	Above	N/A	N/A	Extend underpass	San Carlos	San Mateo
Roadway Modification	B	Brittan Avenue	Trench/Cut	No change	Above	N/A	N/A	Extend underpass	San Carlos	San Mateo
Roadway Modification	B	Howard Avenue	Trench/Cut	No change	Above	N/A	N/A	Extend underpass	San Carlos	San Mateo
Mountain View to Santa Clara Subsection										
None										
San Jose Diridon Station Approach Subsection										
Road Closure	B (Viaduct to Scott Boulevard)	Grant Street	N/A	N/A	N/A	N/A	Yes	Shorten road	Santa Clara	Santa Clara

Type	Alternative	Roadway/Path	Existing Road/Path Grade at Roadway Xing	Proposed Road/Path Profile at HSR	Proposed HSR Grade (Above or Below) at Roadway Xing	Grade Separation	Closure	Modification	City	County
Roadway Modification	B (Viaduct to Scott Boulevard)	De la Cruz Boulevard	Aerial	Trench/Cut	Above	Yes	N/A	Change from overcrossing to undercrossing	Santa Clara	Santa Clara
Roadway Modification	B (Viaduct to I-880)	West Hedding Street	Aerial	No change	Below	N/A	N/A	Rebuild existing overcrossing	San Jose	Santa Clara
Roadway Modification	B (Viaduct to Scott Boulevard)	West Hedding Street	Aerial	Trench/Cut	Above	Yes	N/A	Change from overcrossing to undercrossing	San Jose	Santa Clara
Road Closure	B (both viaduct options)	Stockton Avenue	N/A	N/A	N/A	N/A	Yes	Convert to cul-de-sac	San Jose	Santa Clara
Road Closure	B (both viaduct options)	University Avenue	N/A	N/A	N/A	N/A	Yes	Convert to cul-de-sac	San Jose	Santa Clara
Road Closure	B (both viaduct options)	Emory Street	N/A	N/A	N/A	N/A	Yes	Convert to cul-de-sac	San Jose	Santa Clara
Road Closure	B (both viaduct options)	Chestnut Street	N/A	N/A	N/A	N/A	Yes	Realigned, closed from Asbury Street to West Taylor Street	San Jose	Santa Clara
New Road Crossing	A/B (Viaduct to I-880)	West Taylor Street	Trench/cut	Aerial	Above	Yes	N/A	New HSR overcrossing alongside existing Caltrain overcrossing	San Jose	Santa Clara
Roadway Modification	B (Viaduct to Scott Boulevard)	West Taylor Street	N/A	N/A	N/A	N/A	N/A	Realign westbound Taylor Street to northbound Chestnut Street	San Jose	Santa Clara
New Road Crossing	B (both viaduct options)	North Montgomery Street	At grade	No change	Above	N/A	N/A	Extended to maintain property access	San Jose	Santa Clara
Roadway Modification	B (both viaduct options)	Stover Street	N/A	N/A	N/A	N/A	N/A	Extend Stover Street from South Montgomery Street to Autumn Street	San Jose	Santa Clara
Roadway Modification	B (both viaduct options)	Crandall Street	N/A	N/A	N/A	N/A	N/A	Extend from South Montgomery Street to Autumn Street	San Jose	Santa Clara
Roadway Modification	A	Cahill Street	N/A	N/A	N/A	N/A	N/A	Extend to Otterson; convert to transit only lanes	San Jose	Santa Clara
Roadway Modification	B (both viaduct options)	Cahill Street	N/A	N/A	N/A	N/A	N/A	Extend to Park Avenue; convert to transit only lanes	San Jose	Santa Clara
Roadway Modification	A	Bird Avenue	Trench/cut	No change	Above	N/A	N/A	Rebuild existing underpasses	San Jose	Santa Clara
Roadway Modification	A	Delmas Avenue	Trench/cut	No change	Above	N/A	N/A	Rebuild existing underpasses	San Jose	Santa Clara
New Road Crossing	B (both viaduct options)	SR 87 On-Ramp	At grade	No change	Above	N/A	N/A	Realign ramp	San Jose	Santa Clara
Roadway Modification	A	Fuller Avenue	N/A	N/A	N/A	N/A	N/A	Realign Fuller Avenue cul-de-sac	San Jose	Santa Clara

Sources: Authority 2019a, 2019b

HSR = high-speed rail

I = Interstate

N/A = not applicable

Prop. = Proposed

SR = State Route

Xing = crossing

¹ This table shows the modifications to the roadways resulting from the project, including modifications to existing roadway crossings.² The 25th Avenue underpass is currently under construction and would be completed prior to the construction of HSR. The 28th Avenue and 31st Avenue underpasses are proposed to be built and it is anticipated that they would be built prior to the construction of HSR.

References

- California High-Speed Rail Authority (Authority). 2019a. *San Francisco to San Jose Project Section Transportation Technical Report*. Prepared by Fehr and Peers. December 2019. Sacramento, CA.
- . 2019b. *San Jose to Merced Project Section Transportation Technical Report*. Prepared by Fehr and Peers. September 2019. Sacramento, CA.

